

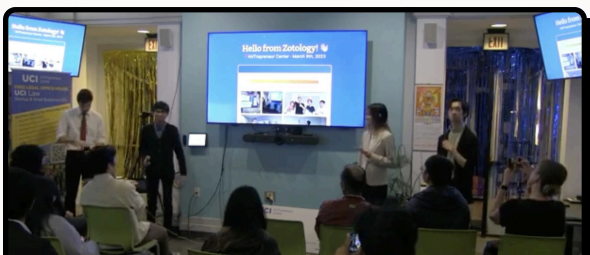
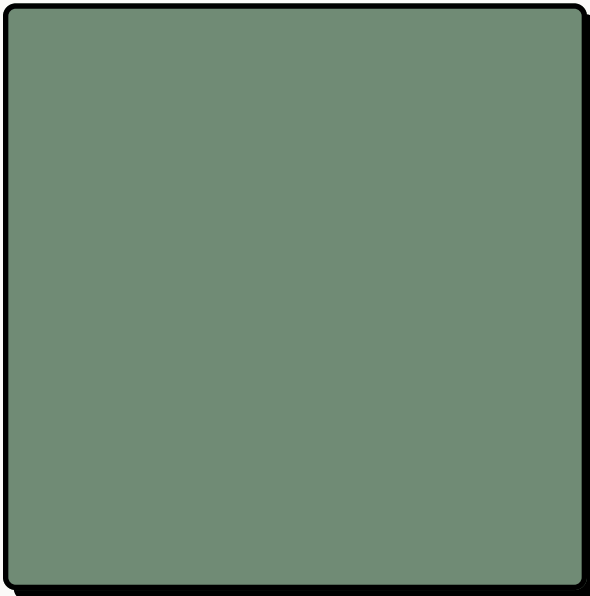


FALL 2024

PORTFOLIO

# John Daniel Norombaba

## University of California, Irvine



# Table of Contents

## Greetings! — 2

My goal is simple. Working on projects that augment how we see and use technology.

## Daily Smirk — 3

### Summary of Daily Smirk 12

How do we improve a peer-assessment tool to meet the dynamic expectations of instructors, while keeping the essence of what The Daily Smirk does.

## WebReg by Zotology — 13

### Summary of WebReg by Zotology 19

How might we deliver a new WebReg experience that provides more functionality to users, while representing the brand identity of the university and its students?

## “Shackled within Society” — 20

### Summary of “Shackled within Society” 21

How electronic ankle monitors contribute to mass incarceration within the United States.

# Greetings!

I'm John Daniel.

I work on projects and ask questions that augment how we see and use technology. Seeing projects to the end, from ideation to deployment. Understanding the needs of users, all the way to the root of why those needs exist.

Humans are weird. Technology is complex. They are fascinating together. Which is why I aim to empower others through technology and human connection.

I'd like to put forth some work that I'm proud of. Work that delivers on the expectations of those I design for. The users.

With much love,  
John Daniel

A handwritten signature in black ink, appearing to read 'John Daniel' with a stylized flourish at the end.

# Configurable and Scalable Peer-Assessments with The Daily Smirk



## Allow Changes to Ratings

### Allow Ratings to be changed

3 day(s) after submission

### Number of times ratings can be changed

5 times

### Require explanation to change

Optional explanation

## Participation

Exceptional engagement and proactive involvement in group activities, demonstrating commitment and initiative.

- ☐ Despite being unable to attend in person, participated fully from remote
- ☒ After missing a meeting, proactively caught up with the project
- ☒ Volunteered for a major piece of follow-on work
- ☐ Took significant initiative

## Collaboration

Exceptional behaviors that enhance teamwork, foster inclusion, and promote a harmonious working environment.

- ☐ Succeeded in bringing everyone into the conversation
- ☒ Found ways to integrate ideas from others in ways not immediately apparent
- ☒ Stood up and corrected a team member who was being disrespectful of others.
- ☒ Broke through a tense/difficult situation, bringing harmony to the discussion(s)
- ☒ Provided outstanding constructive feedback in a positive manner
- ☒ Went above and beyond in helping a team member



## Notification Schedule

### Send Early Reminders

Don't send early reminders

### Send Late Reminders

Don't send late reminders

### Delay revealing ratings by

Don't delay delivery of ratings



## Assessment Schedule

08/20/2024, 11:59:59 PM



08/22/2024, 11:59:59 PM



08/23/2024, 11:59:59 PM



08/25/2024, 11:59 PM



## Contribution

Outstanding efforts and actions that significantly enhance the quality, efficiency, or success of the project.

- ☒ Produced work of amazing quality
- ☒ Delivered key work significantly earlier than needed
- ☒ Stepped in and did the work that someone else should have done
- ☒ Discovered and solved a major problem with our approach



# The Daily Smirk

Jan. 2024 to Present · under supervision of Andre van der Hoek & Yu Lu

## Case Briefing

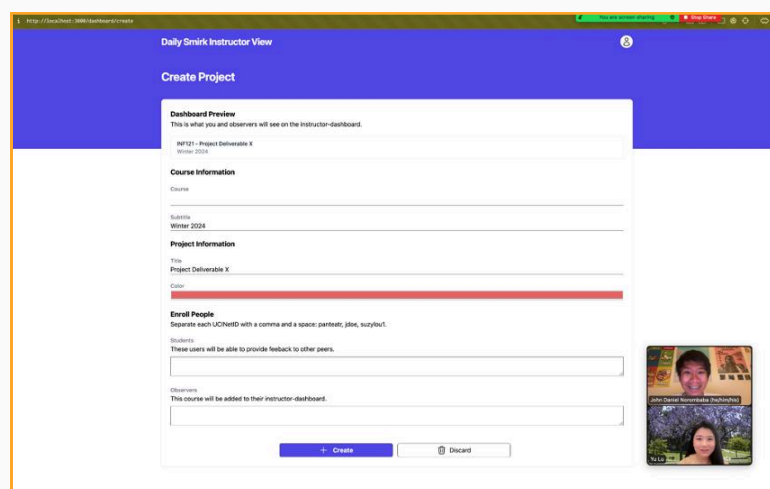
The Daily Smirk is a high-frequency peer-assessment tool created by graduate student Yu Lu, and has 750+ users, including students and instructors. Students rate and provide feedback on their peers' work through Smileys, or Smirks, during a project's lifecycle.

After successful trials in classes like INF121: Software Design I, taught by Andre van der Hoek, The Daily Smirk was almost ready for the masses.

The issue? Not only did instructors want configurable assessment criteria (i.e. the Smileys and feedback), The Daily Smirk's instructor dashboard lacked any UX that would assist them with all the heavy lifting of the backend.

## And so, we ask ourselves...

How do we improve a peer-assessment tool to meet the dynamic expectations of instructors, while keeping the essence of what The Daily Smirk does. High frequency peer-assessments, done easily.



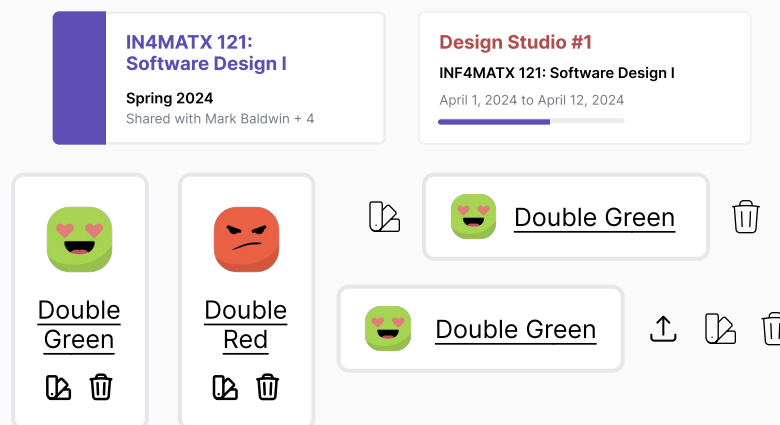
*The Daily Smirk originally had no page that allowed instructors to create courses without interacting directly with the back-end. An early prototype demoed on January 31st, 2023.*

## Essence-Driven Design

“Focus on the essence” was a key idea that stuck with me from Software Design I with Andre van der Hoek. When I started working under him and Yu, I made sure to drive this point home. Especially since that was the same quarter I was introduced to The Daily Smirk.

As Spring came along, I focused my attention to the current components of The Daily Smirk. With the amount of information needed to be conveyed, a kin to index-cards, these digital cards were the way forward.

With my background in Software Engineering, the essence can be found from ideation to deployment. Another example is allowing instructors to create their own rating system or Smirks.

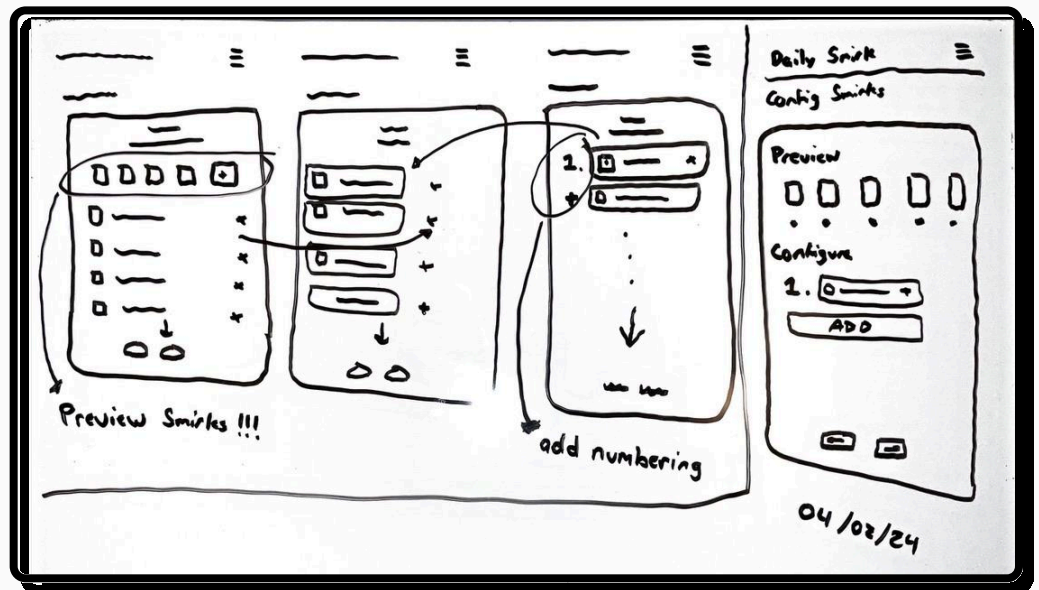


*Smirks are essential to The Daily Smirk, these are early mockups of how we could present Smirks and information to the instructor.*

## How will instructors create their own Smirks?

Low-fidelity wire-frame conceptualizing the user's customization.

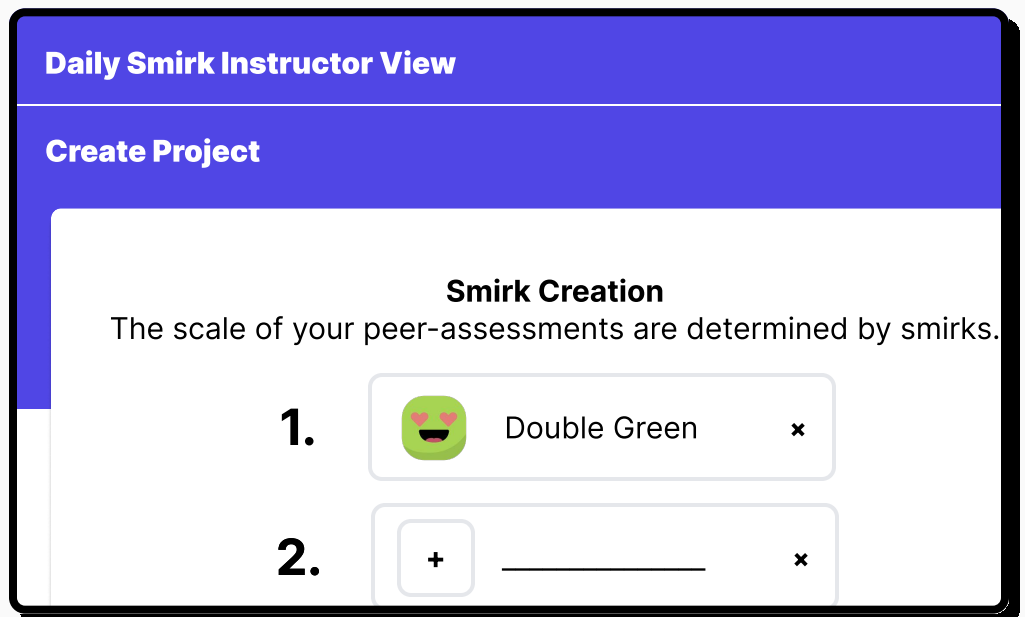
April 2024



## What will this look like with our current design system?

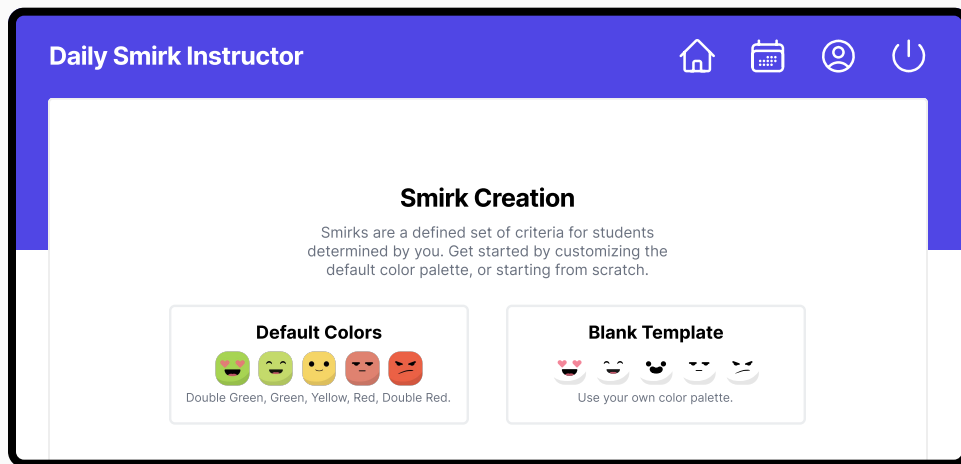
Figma mockup conceptualizing the user's customization.

April 2024

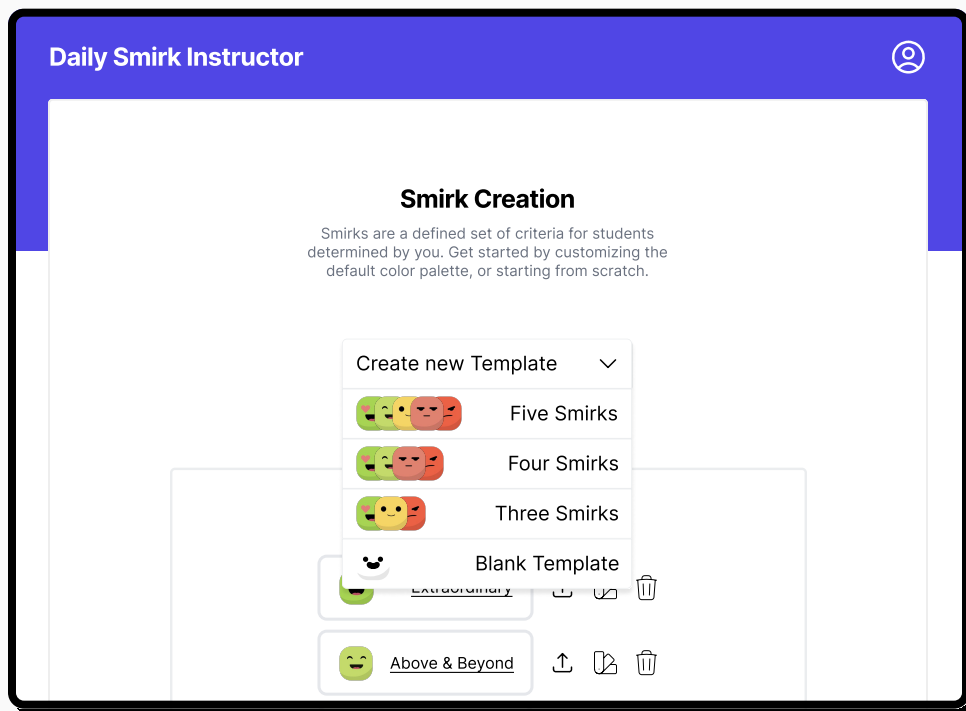


# Who are the instructors, and what do they want?

An iterative back-and-forth with our stakeholders in how they believe instructors will use Smirks, along with how new users to the Daily Smirk could get started. ~ Mockups from Figma created April 2024 to June 2024



Two proposed mechanisms of pre-filling the content area.



## Bringing it all Together

Accommodating the other components in relation to Smirk Configuration, we ended up here. This design decision considers the storage of Smirks on our Supabase; mitigating duplicate default Smirks being saved, and ensuring default data is not modified. Then, we were able to add in reordering and previewing.


### Create Project

Project & Group Information

Smirk Configuration

Feedback Configuration

Summary



#### Smirk Configuration

Smirks are a defined set of rating criteria used by students, determined by you. Get started by customizing the default color palette, or by starting from scratch.

Rating Schema \*

Three Smirks

Default Selected Smirk \*

As Expected


☒ Share Smirks with all users.


☐ Require students to rate themselves.


This is a default template. To customize your own, create a new Smirk and Feedback template. The default Smirks and criterion are available as standalone presets.


<


>


Extraordinary



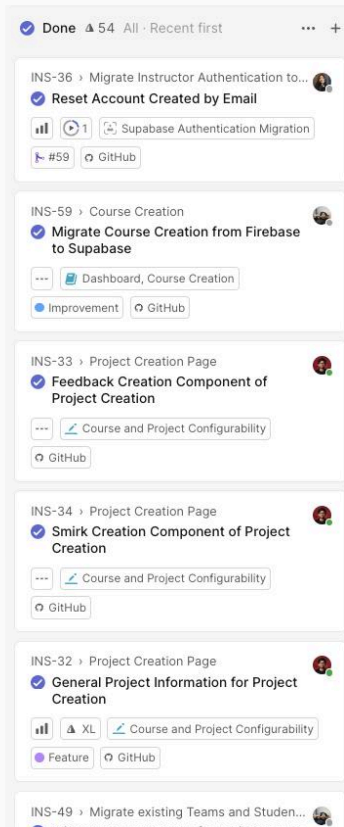
As Expected



Not Helpful



## Developing in Agile



### From Figma to Front-End...

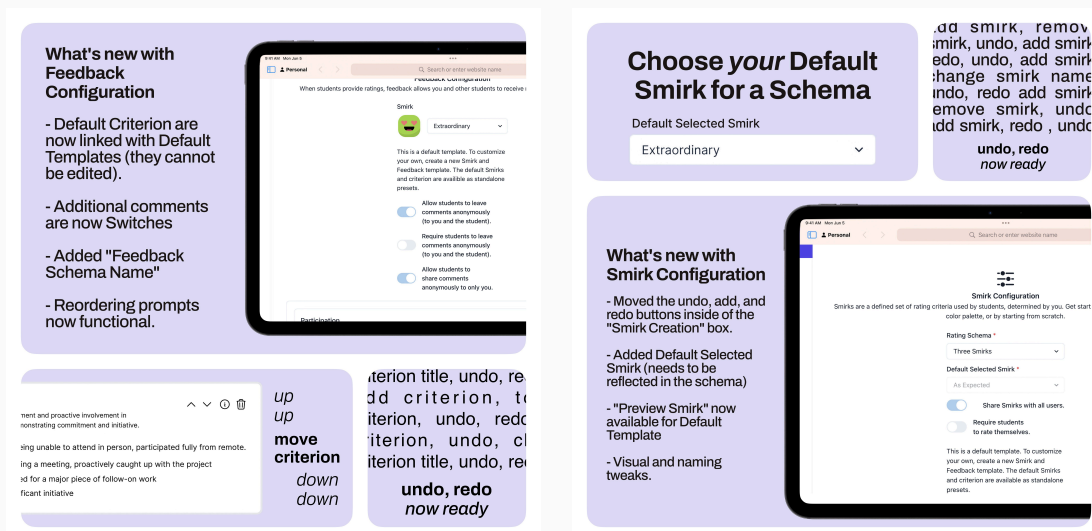
This was where I transitioned from designer to project manager, but as Agile goes, there will be a lot of back and forward.

With our weekly sprints, we made sure to get as much work done as we could. Addressing our key projects like: Project Creation and Management, Dashboard Configurability, etc.

### ... and Beyond.

Given the growing complexity of what instructors wanted, we agreed to migrate from Firebase to Supabase, along with other back-end tweaks involving React and routing.

Our team spent time on different objectives, so we'd be able to converge the front-end and back-end half-way through the summer session, which we achieved.



*Implementing the most important features weekly, while keeping an eye on flexible deadlines.*

## What is The Daily Smirk accomplishing?

The Daily Smirk is currently deployed at the University of California, Irvine in the Department of Informatics. Currently used in classes ranging from Software Design to the Senior Capstone class.

**700+ active users   800+ API calls   1,400+ Auth Requests**

## Credits

My work composed of seeing the design, development, and deployment of The Daily Smirk to instructors and students throughout 2024-2025. Specifically on features that allowed instructors to better define peer-assessment criteria, including a rating and feedback system.

Designing mockups, incorporating feedback from Yu and Andre, and implementing them to production. While managing two-team members, and continuing research on peer-assessment software.

Our tech-stack consisted of ReactJS, TailwindCSS, Firebase, and Supabase. With libraries including Chakra UI and Herolcons. Our design tools consisted of Figma and Miro.

This project was held together by my wonderful colleagues across multiple teams.

### Web Development for the Instructor Dashboard

Maithy Le, John Daniel, Sean Fong

### UI/UX Design for the Instructor Dashboard

John Daniel & Jonathan Vigil

### Development for the Student Dashboard

Julie Cao, Puru Gajare, Jonathan Vigil

And with the feedback and support from our advisors.

### Faculty & Graduate Advisors

Andre van der Hoek & Yu Lu, Department of Informatics

# A Summary of the Daily Smirk

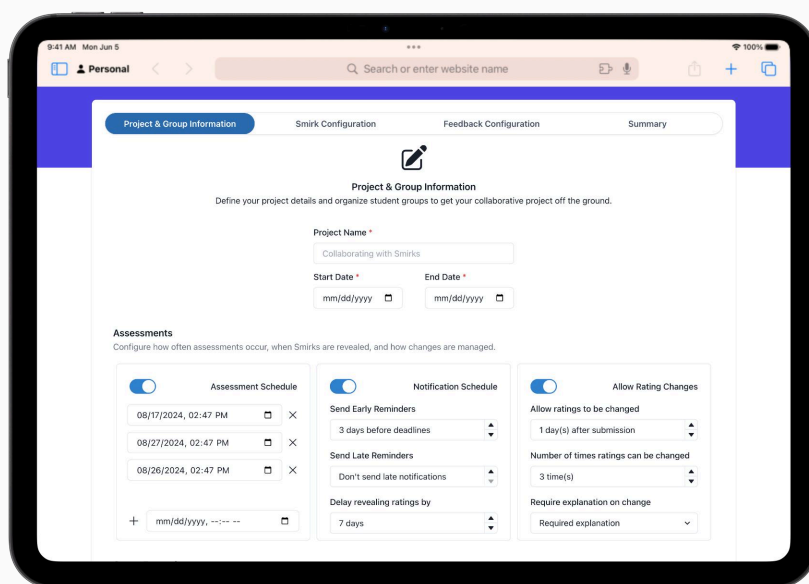
Jan. 2024 to Present · under supervision of Andre van der Hoek & Yu Lu

**How do we improve a peer-assessment tool to meet the dynamic expectations of instructors, while keeping the essence of what the Daily Smirk does? High frequency peer-assessments, done easily.**

My work composed of seeing the design, development, and deployment of The Daily Smirk to instructors and students throughout 2024-2025. Specifically on features that allowed instructors to better define peer-assessment criteria, including a rating and feedback system.

Designing mockups, incorporating feedback, and implementing them to production. While managing two-team members, and continuing research on peer-assessment software.

Our tech-stack consisted of ReactJS, TailwindCSS, Firebase, and Supabase. With libraries including Chakra UI and Herolcons. Our design tools consisted of Figma and Miro.



Used by 200+ students in IN4MATX 121: Software Design I.



## Your Courses

Deadline for Add/Drop: Feb 2nd, 2023 5:00PM

Waitlist View

### Enrolled

#### I&C SCI 6D

Discrete Mathematics for Computer Science

Final: Wed Jun 14 4:00-6:00pm

Code	Type	Location	Time	Instructor	Units	Grade
------	------	----------	------	------------	-------	-------

## Your Schedule

	Mon	Tues	Wed	Thurs	Fri
8AM					
9AM					
10AM					

# Zotology and the case for a new Student Enrollment Experience.

**UCI** WebReg  
University Registrar

[UCI Home](#) [StudentAccess](#) [WebAdmin](#) | [✉ jnoromba](#)

Spring 2023

Search for courses, instructors or enter a 5-digit course code:

### Enrollment Window

**March 6, 2023**  
**8:15AM**

**Fee Status**  
**Not Received**

### My Plans

The best plan ever. →

Secondary Spring Plan →



### Upcoming Dates

- Fri, Mar 17** ● Waitlist release (5 p.m.-8 p.m.)
- Mon, Mar 20** ○ 18-unit enrollment limit (undergrad) lifted (noon)
- Wed, Mar 15** ○ Enroll in units to have tuition and fees paid by financial or graduate aid without \$50 latepayment charge. (5:00 p.m.)

# WebReg by Zotology

Jan. 2022 to Jan. 2023 · with Elise Alinsug, John Lorenzini, and Sean Fong

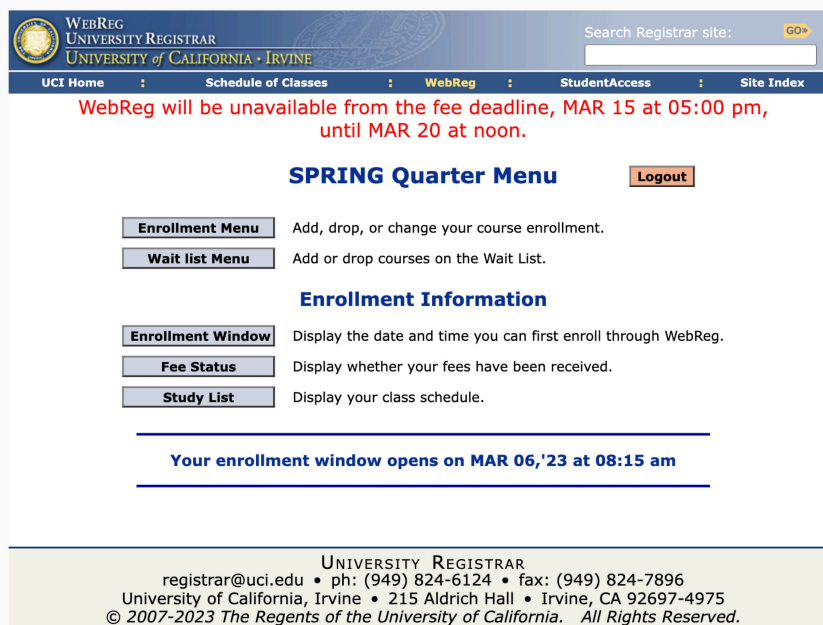
## Case Briefing

Slow, difficult, outdated. Yet, WebReg continues to service 36,000+ students. UC Irvine's student enrollment system haunts students, and even the faculty who proudly call the campus their alma mater.

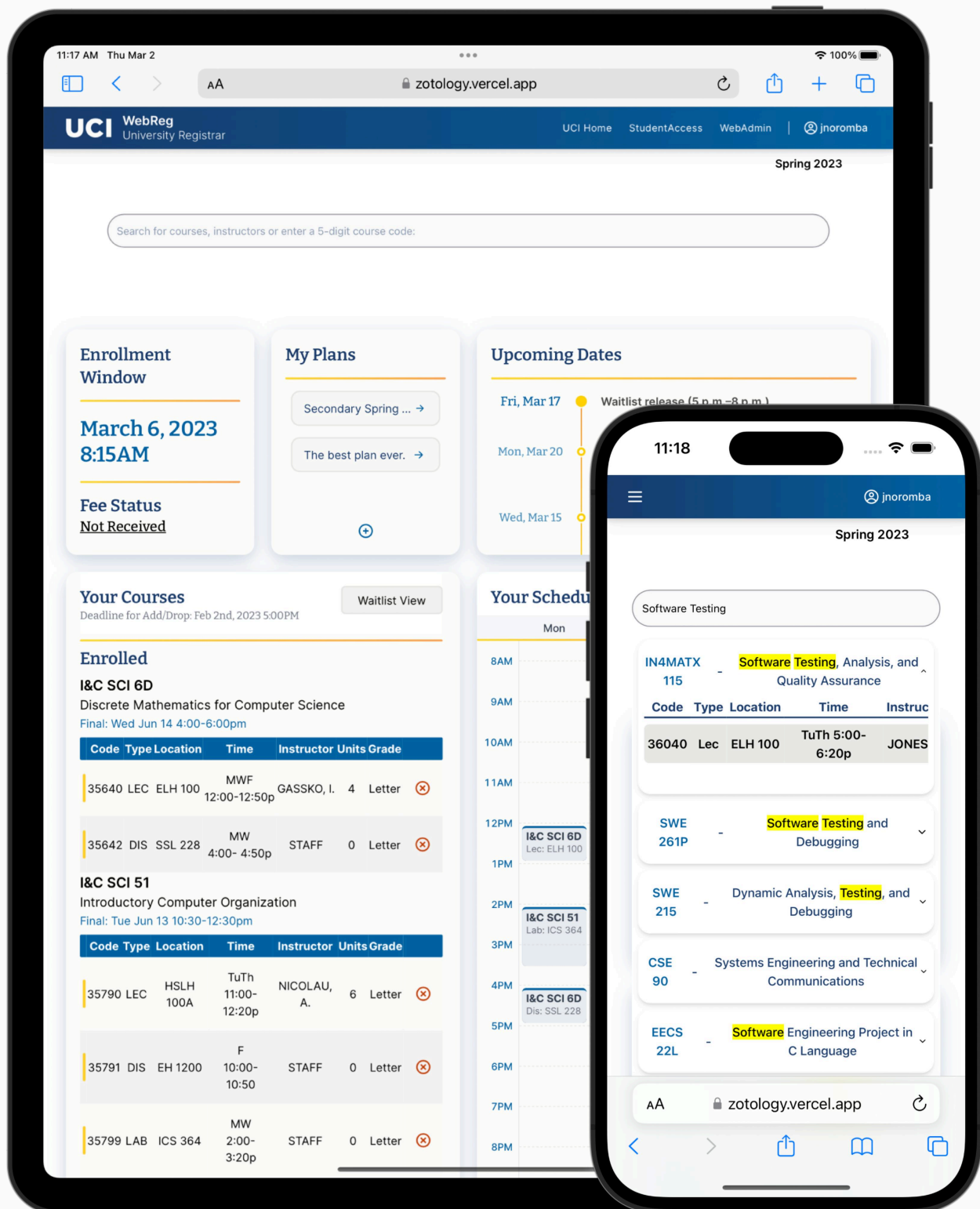
With the Registrar's Office collaborating with the ANTrepeneur Center, students had a chance to change the system. Over the course of three months, competing in the WebReg Hackathon.

## And so, we ask ourselves...

How might we deliver a new WebReg experience that provides more functionality to users, while representing the brand identity of the university and its students?



*Giving airline check-in systems a run for their money, the University's Registrar system, WebReg has remained mostly unchanged for the past decade.*



*"Tastefully composed and constructed to be the perfect upgrade to our current WebReg registration system." - Benjamin Wong*

## An iterative approach to design

What were other universities doing for enrollment management?

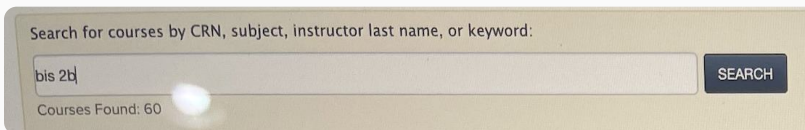
If we were first years again, what would we want WebReg to do for us?

Our user research took us across the state. UCLA, Berkeley, and even my community college back in Bakersfield.

Looking at what other students actually enjoyed using, comparing our implementation to theirs, and addressing the pain points of both to deliver a user experience that just works.

Here's how we did this with a simple (yet robust feature), search.

### Iteration in practice: "searching for a solution"



#### ← Search (UC Davis)

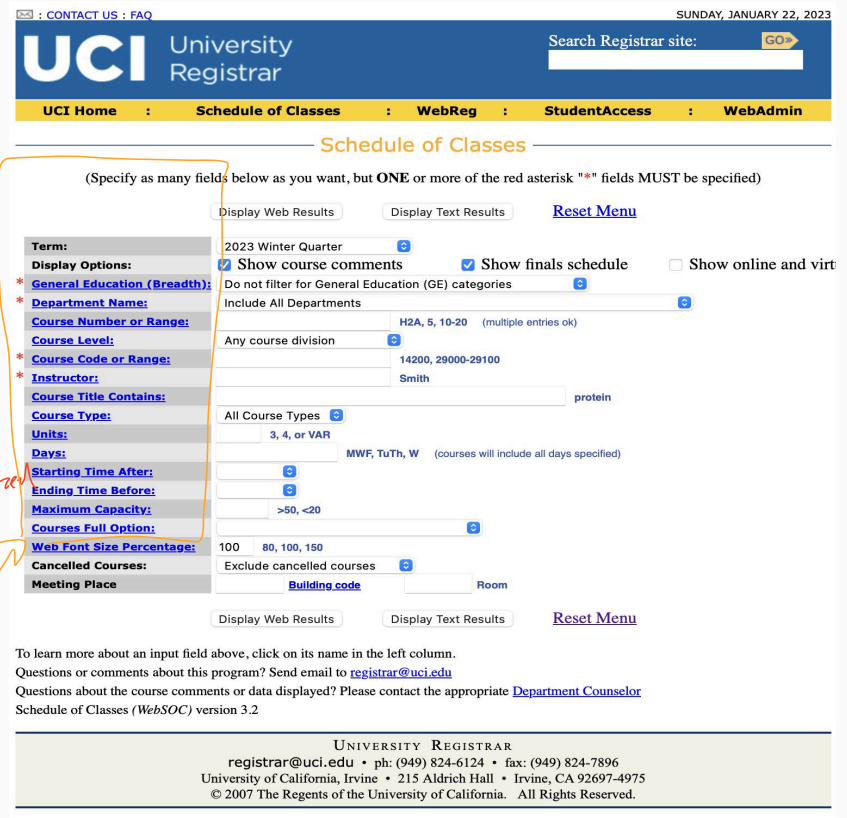
- simple, understandable
- lacks autocomplete.
- a lot of searching + scrolling

We asked our friends over at UC Davis to walk us through their enrollment system. Then, we turned back home to address how we searched for courses.

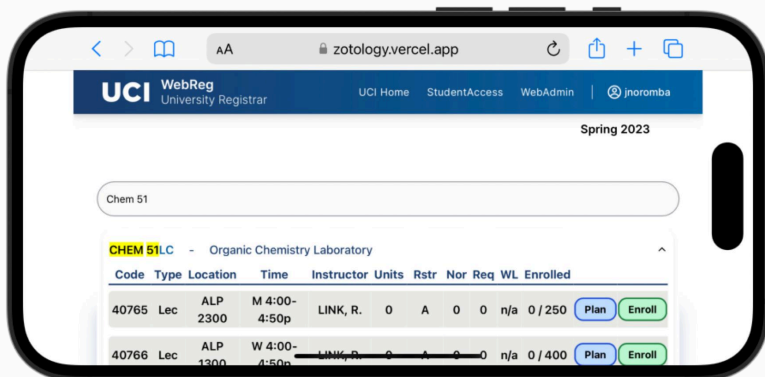
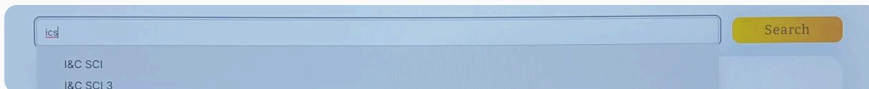
Main idea:  
LOTS of options for  
discoverability, organization  
made an afterthought?

Driving Question:  
How can we provide the  
same broad discoverability  
in an easier, more compact/organized  
package?

Answer 2:  
Create a search engine  
that can identify <sup>specific</sup> sections  
using ANY parameters,  
or search for a wider  
list of offerings by  
school etc.



When a user clicks on a class to search, they expect that information, rather than an additional confirmation step of search.

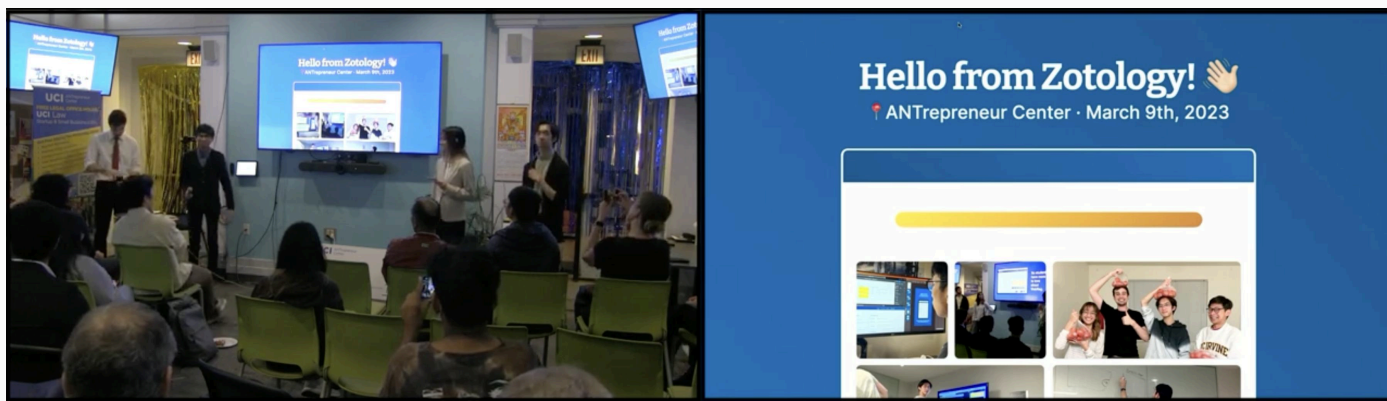


Taking the best of both worlds, while adding a touch of UCI paint to go along with the idea, and you have Zotology's search. Typing for a course auto-completes it, and when the user is ready, they remain in control.

*Finally, we address the pain points by adopting user-expectations.*

## Accomplishing a working demo, and soon, third place.

In one weekend, we managed to get a working demo up and running. This included viable search from actual UC Irvine registrar data. We eventually moved onto the final competition in March. We expanded our scope to address the needs beyond student. Addressing professor and even counselor needs.



*I am a firm believer that the pitch is just as important as the product, and connecting them together enables users to truly understand what our product can do for them.*



Vote for the future of WebReg you want.

Plan ahead for Spring Quarter right now.

**Better Enrollment, Bet on Zotology.**  
Explore the demo, and consider Zotology for the WebReg Hackathon vote.

Search. Plan. Enroll. WebReg (sorta) does it. But Zotology does it better.

Enrollment Window  
March 6, 2023 8:55AM

My Plans  
Spring 2023

Upcoming Dates

Explore the demo, and consider Zotology for the WebReg Hackathon vote.

For your consideration. Zotology for favorite WebReg redesign.

"makes me actually excited about class registration and not just sad and stressed!"  
- @minapalaniappan

Explore here:  
zotology.vercel.app  
zotology.com/vote

For your consideration. Zotology for favorite WebReg redesign.  
zotology.vercel.app  
zotology.com/vote

"that literally looks so good. i love the predictive search."  
- @audrey.ngyn

**Course and Schedule View**

- A friendlier Study List.
- A new way to visualize your schedule.

**Your Courses**  
Deadline for Add/Drop: Feb 2nd, 2023 5:00PM

**Enrolled**

Code	Type	Location	Time	Instructor	Units	Grade
34100	LEC	SSH 100	TuTh 2:00-3:20p	LI, Z.	4	Letter
34104	DIS	PCB 1300	Th 11:00-11:50	STAFF	0	Letter
35640	LEC	ELH 100	MW 12:00-12:50p	GASSKO, L.	4	Letter
35642	DIS	SSL 228	MW 4:00-4:50p	STAFF	0	Letter
36040	LEC	ELH 100	TuTh 6:00-6:20p	JONES, J.	4	Letter

**IN4MATX 115**  
Software Testing, Analysis, and Quality Assurance  
Final: Thu Jun 15 4:00-6:00pm

**ICS SCI 60**  
Discrete Mathematics for Computer Science  
Final: Wed Jun 14 4:00-6:00pm

**COMPSCI 132**  
Computer Networks  
Final: Thu Jun 15 1:30-3:30pm

**Your Schedule**

	Mon	Tues	Wed	Thurs	Fr
8AM					
9AM					
10AM					
11AM					
12PM					
1PM					
2PM					
3PM					
4PM					
5PM					
6PM					
7PM					
8PM					
9PM					
10PM					

Zotology's Final Pitch Slide Deck & Social Media Materials available upon request.

## What did Zotology accomplish?

I spent my time with a team of amazing people, providing impactful research and insight to the overall design and vision of our product.

**200+ authenticated users. 1000+ API calls. 20,000+ searches.**

**Third-place overall Second-place student vote**

## Credits

My primary work consisted on assisting the developers and designers with my knowledge on the current domains, redesigning counselor and instructor views, and promoting our brand through a cohesive presentation and social media posts that represent our brand, parallel with our own campus.

Our tech-stack consisted of ReactJS, TailwindCSS, and Supabase. Our design tools consisted of Figma and Keynote.

I could not have done it without the amazing people and their skills below, and I don't think I would've gotten into design heavily if not for this project.

**Web Development | John Lorenzini, Sean Fong**

**UI/UX Design | Elise Alinsug, John Daniel Norombaba**

# A Summary of WebReg by Zotology

Jan. 2022 to Jan. 2023 · with Elise Alinsug, John Lorenzini, and Sean Fong

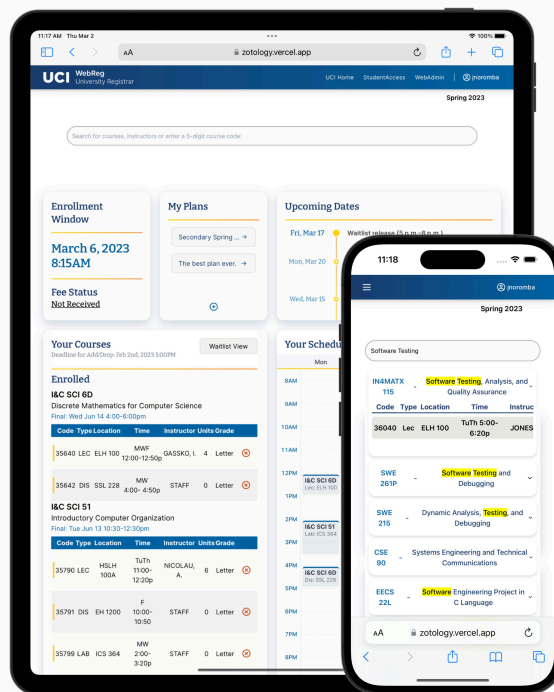
**Slow, difficult, outdated. How might we deliver a new WebReg experience that provides more functionality to users, while representing the brand identity of the university and its students?**

My primary work consisted on assisting the developers and designers with my knowledge on the current domains, redesigning counselor and instructor views, and promoting our brand through a cohesive presentation and social media posts that represent our brand, parallel with our own campus.

Our tech-stack consisted of ReactJS, TailwindCSS, and Supabase. Our design tools consisted of Figma and Keynote.

200+ authenticated users. 1000+ API calls. 20,000+ searches.

Third-place overall Second-place student vote



*"Something like this, where everything is in one place, would be super helpful!" Emily Navarro, Department of Informatics*



# Shackled within Society: How electronic ankle monitors contribute to mass incarceration within the United States

# “Shackled within Society”

Shackled within Society is a paper I wrote for an Argument and Research class, answering the question:

*“Why is electronic monitoring, or the use of ankle bracelets on individuals, contributing to the expanding web of mass incarceration within the United States? How does electronic monitoring segregate those attempting to assimilate into contemporary society?”*

With the following response,

*“Electronic monitoring expands incarceration by imposing control beyond pre-defined prison and jail cells by preventing individuals from assimilating within contemporary society. Users are shackled within society, a consequence of disorderly legislation and social norms, intensified by the growing prison population of the United States,”*

A full version of the e-portfolio can be found at:

[https://canvas.eee.uci.edu/eportfolios/95216/Reflective\\_Introduction](https://canvas.eee.uci.edu/eportfolios/95216/Reflective_Introduction)

Mass Incarceration - Sunday, January 16 <sup>th</sup> , 2022 - Brainstorming/Topic Formation	
<b>Solitary Confinement:</b>	<b>Electronic Monitoring / Ankle Monitors:</b>
<a href="https://www.prisonpolicy.org/blog/2020/12/08/solitary_symptoms/">https://www.prisonpolicy.org/blog/2020/12/08/solitary_symptoms/</a>	Mass incarceration and technology -> electronic monitoring from the EFF
Terms: "special housing units," "administrative segregation," "disciplinary segregation," and "restrictive housing."	How has technology contributed to the rise of those incarcerated in the US, and how has it opposingly held police accountable?—too broad
Strong, Justin D., et al. "The Body in Isolation: The Physical Health Impacts of Incarceration in Solitary Confinement." <i>PLoS ONE</i> , vol. 15, no. 10, Oct. 2020, pp. 1–20. EBSCOhost. doi:10.1371/journal.pone.0238510.	Electronic Monitoring: <a href="https://link.springer.com/content/pdf/10.1007/s10612-012-9165-0.pdf">https://link.springer.com/content/pdf/10.1007/s10612-012-9165-0.pdf</a>
CG Researcher: psychological effects, inhumane, for safety?	"electronic monitoring" "e-carceration" "digital incarceration"
	<a href="search.ebscohost.com/login.aspx?direct=true&amp;db=a9h&amp;AN=153556290&amp;site=ehost-live&amp;scope=site">search.ebscohost.com/login.aspx?direct=true&amp;db=a9h&amp;AN=153556290&amp;site=ehost-live&amp;scope=site</a>
	Is electronic monitoring contributing or solving the US's issue of mass incarceration? What is the purpose of electronic monitoring, and how does it negatively affect "criminals" who are trying to assimilate into contemporary society?
	How does electronic monitoring grow the web of mass incarceration?
	Why is electronic monitoring, or the use of ankle bracelets on individuals, contributing to the expanding web of mass incarceration within the United States? How does electronic monitoring segregate those attempting to assimilate into contemporary society?
	What are the laws regarding ankle monitors, in what ways do they legally and physically restrict individuals? Recidivism rates of incarceration versus e-carceration. Which demographic do ankle monitors affect the most?
	How am I framing the description? How is it a problem? Where is the problem? The ankle or the alternative?

How has technology contributed to the rise of those incarcerated in the US, and how has it opposingly held police accountable?—too broad

Is electronic monitoring contributing or solving the US's issue of mass incarceration? What is the purpose of electronic monitoring, and how does it negatively affect "criminals" who are trying to assimilate into contemporary society?

How does electronic monitoring grow the web of mass incarceration?

Why is electronic monitoring, or the use of ankle bracelets on individuals, contributing to the expanding web of mass incarceration within the United States? How does electronic monitoring segregate those attempting to assimilate into contemporary society?

What are the laws regarding ankle monitors, in what ways do they legally and physically restrict individuals? Recidivism rates of incarceration versus e-carceration. Which demographic do ankle monitors affect the most?

How am I framing the description? How is it a problem? Where is the problem? The ankle or the alternative?

**Artifact 3:** The rejection of solitary confinement, and all the questions asked.

*An artifact from my reflection, showing my brainstorming process.*

John Daniel Norombaba

Scott Alexander Streitfeld

WR 39C: Argument and Research

06 February 2022

### Shackled within Society: Ankle Monitors & Mass Incarceration

Originally imagined in the sixties to keep track of juvenile delinquents, the deployment of ankle monitors with electronic monitoring has become more prevalent within the system of mass incarceration in the United States. Original creator Robert Gable envisioned the radio communicating devices “...to give rewards to [juvenile] offenders when they were where they were supposed to be, that is they were in drug treatment session, or went to school or a job,” (Anderson). Unlike the juvenile users, the ankle monitor was created to be innocent. We can call Gable’s experiment by what it was, an experiment. In 1972, the United States had “fewer than 350,000 people were being held in prisons and jails nationwide,” (Alexander 8). An indication of society moving past the need of electronic monitoring. However, almost a decade later, the technology fell back into favor amongst a district judge from Arizona, Judge L. Love, who wanted to invest in technology to combat a rise of incarceration. A sudden turn from the original indication of a decrease in the 70s. Due to a lack of funding, electronic monitoring tried to expand, but in many instances, failed. Gable thought, “Perhaps the inventors lack adequate capital, judicial backing, engineering skill, salesmanship, or simply have other competing demands and interests,” (7). In present day though, companies like BI Incorporated and Satellite Tracking of People remain large and prominent in the prison industrial complex.

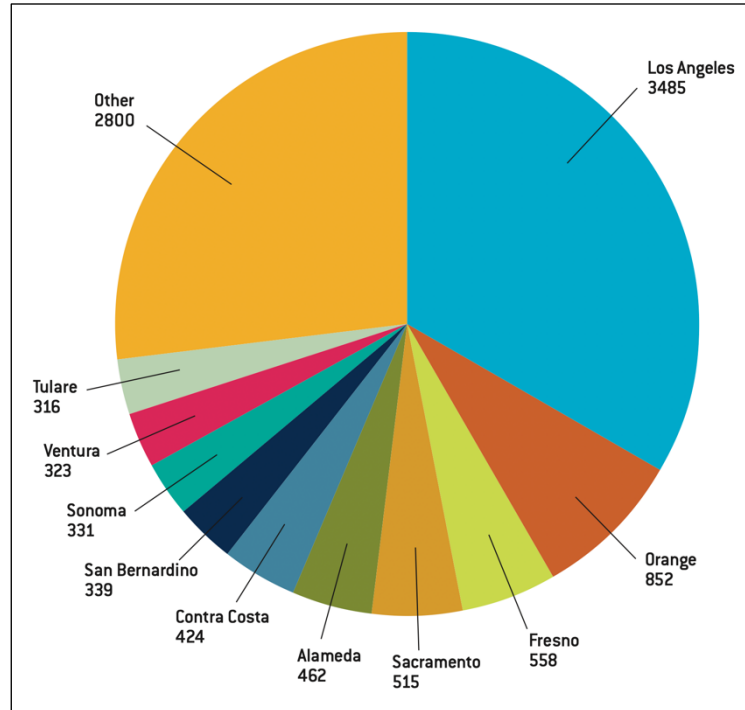
After the technology behind electronic monitoring evolved to use GPS, and the devices typically deployed to monitor individuals, ankle monitors transformed into a convenient accessory to incarceration. In practice, there are cases exist where electronic monitoring benefits society. As a board member of the American Parole and Probation, Joseph Russo says, "...electronic monitors can be a reliable tool for tracking offenders who need a high level of supervision and they can help link people to crimes," (Glasser). However, exploring electronic monitoring and ankle monitors at hand requires viewing the idea through the scope of a large problem within the criminal justice system, mass incarceration. Because the United States has a large population of incarcerated individuals, the technology will be heavily discussed as a harmful counterpart, encapsulating those caught in the crossfire of those who possibly require actual incarceration. Electronic monitoring expands incarceration by imposing control beyond pre-defined prison and jail cells by preventing individuals from assimilating within contemporary society. Users are shackled within society, a consequence of disorderly legislation and social norms, intensified by the growing prison population of the United States.

### **Behind Invisible Bars: Who's Under Electronic Monitoring?**

The number behind electronic monitoring is not certain, as the data collected is inconsistent. Kate Weisburd and law students in a Georgia Washington Law School publication note there were 131,000 monitored individual in 2015, however, "[t]he number of people on monitors today is likely much higher, as monitoring is also used to track

people in the juvenile justice system and in immigration proceedings,” (3). Recently, “In 2017, there were roughly 10,000 unique young people on [electronic monitoring] in the California juvenile justice system,” (Crump and Gandhi 5). Of those roughly 10,000, a large portion of the juveniles are from Los Angeles

(see graph 1). Juvenile delinquents were originally the demographic when Robert Gable experimented with ankle monitors, and today, contribute to the large population of those incarcerated. Data representing those under electronic monitoring is unique because of the outliers like juvenile delinquents. The



Graph 1. A breakdown of the juveniles on electronic monitoring in California, amounting to over 10,000 individuals from: Catherine Crump and Amisha Gandhi. "Electronic Monitoring of Youth in the California Justice System." *Berkley Law*, 16 Nov. 2020. [www.law.berkeley.edu/wp-content/uploads/2020/11/Samuelson-Electronic-Monitoring-Youth-California-Addl-Data-11\\_2020.pdf](http://www.law.berkeley.edu/wp-content/uploads/2020/11/Samuelson-Electronic-Monitoring-Youth-California-Addl-Data-11_2020.pdf).

unaccounted growth of these populations questions the contribution of the juvenile and other possible populations when considering the magnitude of mass incarceration.

Within Wayne County, Black Americans are overrepresented in the incarcerated population, even while under electronic monitoring. According to the Vera Institute of Justice, “Black people are 3.5 times more likely than white people to be in the jail and two times more likely to be under electronic monitoring,” in Wayne County, Michigan (Cross et al.) Through the lens of mass incarceration, alternatively imprisoning Black individuals through ankle monitoring does not solve the structural and racial issues within the criminal system. After a period of alternate incarceration, individuals are still subject to the same post-incarceration effects and prejudices exhorting by society. Especially with the existing stigma and stereotypes attributed with the Black community, created by the same system attempting to solve itself. Ankle monitors as an alternative means of incarceration is still incarceration. They only expand the issue as the structural and societal racism experienced by Black individuals in the criminal justice system remains mostly untouched.

With juveniles and people of color, immigrants are also electronically monitored, further entangled within the United States’ immigration and incarceration system. Sarah Betancourt for *The Guardian* reported on the trauma immigrants experience under electronic surveillance, intensifying amid the stresses of the immigration system, within the system of mass incarceration. Attributed to the monitors themselves, “Many immigrants report difficulty sleeping because of the lights, alarm sounds and vibrations from the monitor’s battery, and the fear that it isn’t properly charged, which could lead to a call or visit from ICE,” (Betancourt). As an alternative to incarceration, electronic monitoring poses greater risks to individuals already displaced in the United States because of their immigration status. Some may be ostracized from society through

incarceration through transit, through the identifiable ankle monitor, or a combination of both. Subjected to control, immigrants under electronic monitoring only experience additional uncertainty on top of their current situation.

### **Blurred Lines: The Results of Electronic Monitoring**

Individuals under electronic monitoring typically experience discrimination within society, as they carry a criminal record along with their alternative sentence. In discussing the stigma and collateral consequences of electronic home monitoring, Gabriella Kirk argues how user's perceptions between actual incarceration and alternative incarceration demean the experience of the latter, in a study with thirty individuals from Chicago. Kirk also discusses how criminal conviction and the restriction of movement disrupted users from participating in society. Andrew, an interviewee of Kirk, was fired after his employer would not tolerate the restriction of his movement, because of police finding drugs with him in a friend's car; "His subsequent financial struggles had repercussions for his housing stability, his ability to rely on social ties, and his emotional well-being," (Kirk 651). Electronic surveillance allows individuals to be ostracized by society, paying the price as the inability to work harms an adult's ability to exist and function within contemporary society. In the case of Andrew, the consequences of the alternative punishment of at-home monitoring went beyond the initial conviction, especially as his case was later dropped. Electronic monitoring expects users to function within society, separated from incarcerated individuals. However, both parties under the same system of incarceration will experience the consequences of carrying the label of "criminal" with the key difference of electronically

monitored individuals experiencing the discrimination while carrying their sentence, instead of after.

Confusing rules and legislation also complicate the sentence of monitored individual, stemming from the authority of law enforcement. Reporting on an increase of electronic monitoring during the Coronavirus pandemic, April Glaser for *NBC News* highlights the experience of a formerly incarcerated Evelyn Canal turned activist for criminalized youth. Speaking with *NBC News*, Canal recounts two instances of being punished for “...charging [her] ankle monitor one minute late...” and for needing to evacuate a building due to a fire (Glaser). Gabriella Kirk also noted within Cook County, “respondents... were given a variety of instructions that often did not line up with official program descriptions,” (646). Users under surveillance are conditioned to obey the terms of their sentencing, for possible fear of retaliation or further punishment. Weisburd, also mentioned by Glaser, synthesized the issues of and discussed the actions of the stakeholders of electronic monitoring. Discussing the vagueness of rules, the ambiguity of responses to violation, Weisburd uses Idaho’s rules as an example, stating:

‘Failure to comply with any of the following conditions is considered a violation of this agreement and your probation or parole supervision. Violations will be addressed by your supervising officer, which may result in a violation of your probation or parole and a term of incarceration,’ (Weisburd et al. 21)

Under the discretion of law enforcement individuals and involved parties like the electronic monitoring company who deploys the technology, individuals can remain incarcerated in unique situations unlike those typically occurring within prisons or jails.



Either instance, individuals are under the discretion of law enforcement, with the chance to be kept in control within the system of criminality remaining equal.

Stemming from the authority of monitoring companies, contracted with law enforcement agencies, high user fees for surveillance prey on monitored individual. Exploring the complex rules established within different regions and the harmful disruptions imposed upon users, Kate Weisburd and the law students at George Washington University Law School also concluded how users are charged “often expensive” fees, like in Sacramento, where a self-employed individual is charged a daily fee of “\$47.00” (Weisburd et al. 15). With users charged at high amounts, law enforcement agencies can pay large amounts to monitoring companies (see table 1). Elaborated well by James Kilgore, “Moreover, as in the case of prison ownership and management, the private firms’ presence would be dominated by a fundamental conflict

Table 1

Maximum Cost Agencies are Charged for Electronic Surveillance Services.

Name and Location of Agency	Name of Private Company	Duration of Contract	Monetary Cap
Texas Civil Commitment Office <sup>185</sup>	3M Electronic Monitoring	2 years	\$7,400,00.00
Wyoming Department of Corrections <sup>186</sup>	BI Incorporated	2 years	\$120,000.00
Cook County Government <sup>187</sup>	Track Group	3 years	\$4,064,311.50
Los Angeles County Probation Department <sup>188</sup>	Satellite Tracking of People	1 year	\$560,000.00

Source: Weisburd, Kate, et al. *Electronic Prisons: The Operation of Ankle Monitoring in the Criminal Legal System*. 41st ed., vol. 2021, George Washington University Law School, Public Law & Legal Theory Research Paper Series, 2021, [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3930296](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3930296).

of interest—the need to maximize profits by keeping as many people under their control for as long as possible, hardly in keeping with notions of rehabilitation or any rights of the convicted,” (136). Because private companies and prisons rely on profit to operate, the exploitative nature of these user fees complicates the intent and purpose of ankle monitors within the criminal system on both the prison and the private corporation. Surveillance creates a financial enclosure for users. As when users are unable to afford user fees, and are unable to maintain job insecurity, the resulting financial burden is punitive.

Returning to what the ankle monitor’s creator, Robert Gable, told *NPR*, “Unfortunately, electronic technology has gone to punishment instead of the use of positive reinforcement,” (Anderson). Those under electronic monitoring are a part of the growing number of incarcerated individuals within the United States. Uniformly unaccounted for, their number can only grow within and along the issue of mass incarceration. The rules set by agencies punish users, and society ostracizes the monitored, treating them with their incarcerated counterpart as equal. What electronic monitoring changed was the border of what society considers a prison or jail cell, but what continued is the expansion, the addition to a system that continues to grow within the United States. As the word incarceration remains true and brutal in the United States, shackled within society are those incarcerated and monitored through an ankle monitor.

## Works Cited

Alexander, Michelle. "The New Jim Crow." *American Prospect*, vol. 22, no. 1, Jan.

2011, pp. A19–A21. *EBSCOhost*,

[search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=56522975&site=ehost-live&scope=site](https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=56522975&site=ehost-live&scope=site)

Alexander's introduction heavily influenced the direction of the paper, relating the issue of mass incarceration with the technology of ankle monitors and electronic monitoring. She states parallels within the current issue of mass incarceration and the Jim Crow era of discrimination. The text was briefly mentioned in the introduction, through a statistic that visualized the first falling out of the ankle monitor, with the decrease of incarcerated individuals within the United States.

Anderson, Emma. "The Evolution of Electronic Monitoring Devices." *NPR*, 24 May 2014,

<https://www.npr.org/2014/05/22/314874232/the-history-of-electronic-monitoring-devices>.

Emma Anderson for *NPR* reports on the history of electronic monitoring devices, describing the device's change of nature, through the account of Robert Gable, the original creator, and through their current use in the criminal justice system. The article drove the introduction's narrative-style of prose, providing context important to the audience, and to where I needed to direct my research to. Gable's original perspective of monitoring for positive reinforcement contrasts what monitored individuals experience in the present heavily made me see the distortion of electronic monitoring, and their addition to the problem of mass incarceration.

Betancourt, Sarah. “‘Traumatizing and Abusive’: Immigrants Reveal Personal Toll of Ankle Monitors.” *The Guardian*, 12 July 2021, <http://www.theguardian.com/us-news/2021/jul/12/immigrants-report-physical-emotional-harms-electronic-ankle-monitors>.

*The Guardian's* Sarah Betancourt reports on the mental state of immigrants using ankle monitors, through accounts gathered by the journalist. Betancourt mentions the conversation regarding the use of ankle monitors in the criminal justice system, including the actions taken by BI Incorporated and the Biden and Trump administration. The effects of electronic monitoring are emphasized when exploring the demographics of those under monitoring, compounding with the additional stresses of immigration.

Cross, Amy, et al. “Reducing the Overrepresentation of Black People in the Jail Population and Criminal Justice System More Broadly.” *Vera Institute of Justice*, May 2020, <https://www.vera.org/jail-incarceration-in-wayne-county-michigan/reducing-the-overrepresentation-of-black-people-in-the-jail-population-and-criminal-justice-system-more-broadly>.

The Vera Institute allowed me to look at electronic monitoring in relation to mass incarceration and the overrepresentation of Black individuals. Amy Cross provides data on incarceration from 2018 to 2019 and attempts to address the overall issue of mass incarceration within Wayne County. The specific chapter explores the racial disparities, including the increased likelihood of Black individuals on electronic monitoring. Mentioned within the first section was a specific statistic that drove a look

within the issue of positioning ankle monitors as solutions, when they mainly continue a problem within the racial dimension.

Crump, Catherine, and Amisha Gandhi. "Electronic Monitoring of Youth in the California Justice System." *Berkley Law*, 16 Nov. 2020, [https://www.law.berkeley.edu/wp-content/uploads/2020/11/Samuelson-Electronic-Monitoring-Youth-California-Addl-Data-11\\_2020.pdf](https://www.law.berkeley.edu/wp-content/uploads/2020/11/Samuelson-Electronic-Monitoring-Youth-California-Addl-Data-11_2020.pdf).

Catherine Crump and Amisha Gandhi's report was shorter but contained a plethora of information regarding juvenile delinquents in California under electronic incarceration. As there was some difficulty finding specific data on electronic monitoring, the juvenile dimension allowed me to expand on the implications on the overall mass incarcerated. Furthermore, the report allowed me to transition from the introduction, and formally bridge the original target of ankle monitors (juveniles) and their current targets (juveniles and others), contrasting the differences from positive reinforcement and actual punishment.

Gable, Robert S. "The Ankle Bracelet Is History: An Informal Review of the Birth and Death of a Monitoring Technology." *Journal of Offender Monitoring*, vol. 27, no. 01, 2014, pp. 4–8, <https://www.civicrosearchinstitute.com/online/PDF/The%20Ankle%20Bracelet%20Is%20History.pdf>.

Original creator of the ankle monitor Robert Gable tells the story of the ankle monitor, and specifically the legacy, as Gable deems the monitor becoming outlived by newer technology. The overarching story, along with the interview with Judge L. Love

also helped expand the context within the introduction and filled the gaps between the story of the ankle monitor.

Glaser, April. "Incarcerated at Home: The Rise of Ankle Monitors and House Arrest during the Pandemic." *NBC News*, 5 July 2021, <https://www.nbcnews.com/tech/tech-news/incarcerated-home-rise-ankle-monitors-house-arrest-during-pandemic-n1273008>.

Glaser reporting for *NBC News* reported on research from George Washington University's Kate Weisburd and provides discussion from different law and justice experts on the use of ankle monitors rising during the Coronavirus pandemic, with a preface on their original history. Encapsulating on the struggles within electronic monitoring, Glaser provides perspective on the rise by providing the account of Evelyn Canal, a youth activist for Dream Beyond Bars who was a former ankle monitor user, corroborating with a report from UC Berkley that many juveniles are under surveillance. Glaser follows the story of Evelyn Canal and mentions how ankle monitors are tricky because of their ability to help, as referenced in a case related to the January 6<sup>th</sup> Capitol incident, but also to harm in the direct examples of the fees attributed to using ankle monitors. The tricky situations mentioned by Glaser allowed me to address a possible counterargument in the introduction of this text, which allowed me to pivot the audience to consider ankle monitors in the scale of mass incarceration. Overall, the anecdotes reported by Glaser allowed me to evaluate the issues of ankle monitoring, alongside the relations the issues had with mass incarceration.

Kilgore, James. "Progress or More of the Same? Electronic Monitoring and Parole in the Age of Mass Incarceration." *Critical Criminology*, vol. 21, no. 1, 2013, pp. 123–39, <https://doi.org/10.1007/s10612-012-9165-0>.

James Kilgore explores the issues of electronic monitoring, in relation to parole. Briefly, Kilgore talks about mass incarceration, along with the system's move away from rehabilitation into punishment. Kilgore's account on electronic monitoring companies was specifically used to build this paper's ethos, as he perfectly described the conflict of interest between profit and incarceration. This paper and Kilgore's journal article share similar sentiments, as we both define electronic monitoring as unable to be a fit alternative to incarceration.

Kirk, Gabriela. "The Limits of Expectations and the Minimization of Collateral Consequences: The Experience of Electronic Home Monitoring." *Social problems* 68.3 (2021): 642–657. Web.

Gabriela Kirk, in the article within Volume 68, Issue 3 of *Social Issues*, published on August 3<sup>rd</sup>, 2021, considers multiple user's experience under house arrest, to argue that their minimization of the effects of electronic home monitoring attributes to the social climate and overall problem within mass incarceration. There are multiple anecdotes told by Kirk, and how the implicit branding of "criminality" has collaterally affected the job and resident status of certain individuals. While electronic monitoring poses an alternative to incarceration, per advertising of the companies invested in deploying them, Kirk concludes that users synthesize their own perception of criminal justice to downplay possible downsides to the technology. Kirk's argument is relevant within this paper, as my argument explores how electronic monitoring is similar

incarceration. Using the journal's anecdotes, I was able to use those perceptions to perpetuate the overall issue of positioning ankle monitors as alternatives to mass incarceration.

Weisburd, Kate, et al. *Electronic Prisons: The Operation of Ankle Monitoring in the Criminal Legal System*. 41st ed., vol. 2021, George Washington University Law School, Public Law & Legal Theory Research Paper Series, 2021, [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3930296](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3930296).

Kate Weisburd, along with students at George Washington University expose the negative aspects of electronic monitoring through statistical and legislative analysis, asserting that monitoring contributes to the nationwide issue of mass incarceration; while, discussing alternatives and proposing solutions to each problem they raise. Through data gathered, Weisburd et al. uses graphs, tables, and maps to visualize the data from different regions in the United States, highlighting the nonuniformed rules individuals are subjected to. This paper heavily touches Weisburd and her law student's work, as they provide a comprehensive overview on many of the aspects mentioned like high user fees and the confusing rules electronic monitoring entails.



**Thank you!**

It is safe to close  
your file viewer.

<https://ics.uci.edu/~jnoromba>

