

Design Exercises

Informatics 121 Oct 23, 2008

Design Exercise I

- Suppose we are to give out an award for excellence in software design. Create a design for a statue that we would actually give to the recipient of the award...
- ... and be able to explain its meaning...
- ... in 10 minutes...
- ... and money is no object.

Teams

- Team One
 - SACUETES, JAY
 - CACHO, LANCE
 - **6** CHISLOM, ALTON
 - CURTIS, CHAD
 - DEMPSEY, MITCHELL
 - **VILLAMARZO, JOSHUA**
- Team Two
 - DITCH, SCOTT
 - OAN, ALEXANDER
 - DUNCAN, ROBERT
 - DYKZEUL, BRADLEY
 - FRITZ, MATTHEW
 - SHIGEKAWA, MATTHEW
- Team Three
 - GASKILL, JEFFREY
 - # HUANG, ALLEN
 - JOLLY, ROBERT
 - KAHN, BENJAMIN
 - KAISER, ALEXANDER

- Team Four
 - LEE, DEREK
 - \$\text{LIU}, LESLIE\$
 - 🕵 LIU, ZHE SU
 - MILEWSKI, JAMES
 - MORGAN, DANIEL
 - VILLANUEVA, AYLWIN
- Team Five
 - ROEDER, SCOTT
 - ROSE, JAMES
 - RUIZ LOPEZ, TOMAS
 - SCHRAMM, DAVID
 - SINCLAIR, JORDAN T.
 - ZEPEDA, LANCE

Reflection

How hard was it to think of the design for the statue?

How hard was it to create the design for the statue?

Could you express everything you wanted of your design?

Design Exercise II

- Each team should create a design for a bridge using a single set of Geomag magnetic sticks and balls.
- The bridge must span an 8 inch gap
- The bridge must be able to suspend a large can of Play-Doh at an arbitrary spot on the bridge.
- The cost of the bridge should be minimized. Each stick and each ball cost 1000 dollars.

Exercise II, cont'd.

- On Tuesday, bring a description of your design to class.
- This description must be text only. This is important. The description must be text only.
- Another team will build the bridge according to this design, and will have 20 minutes to do so.
- The design team and build team will not be able to communicate or clarify anything with each other.
- The designers and builders of the lowest cost bridge that spans 8 inches and supports the can of Play-Doh will win.

Exercise II, cont'd.

- There will subsequently be a change --- The change may involve a change in price, maximum components available, the length required, or something else entirely.
- The build team will need to improvise to address the change.
- If you want to win as a design team, you should make your design as robust and flexible as possible.
- BRING YOUR SET TO CLASS!