10/26:
Design Day and the Project Video

The Capstone Experience

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Fall 2023
Design Day and the Project Video

- Design Day
  - Project Video
  - What’s ahead?
Design Day Overview

• Engineering Building
• Friday, December 8, 7:00 a.m. – 2:30 p.m.
• Exhibits of Design Projects
  ▪ From Entire College of Engineering
  ▪ Open to the Public
  ▪ Visitors Include
    o Faculty
    o Family and Friends
    o Corporate Sponsors
    o Middle and High School Students

• Dress is Business
Design Day Activities

• Design Day Setup, Thursday December 7
  ▪ 3rd Floor Engineering Building
  ▪ 1:00 p.m. – 3:00 p.m.

• Design Day, Friday December 8
  ▪ 7:00 a.m. Setup
  ▪ 8:00 a.m. Team Exhibits
  ▪ 12:01 p.m. Tear Down and Lunch
  ▪ 1:15 p.m. Awards Ceremony
Team Exhibit

• Table
• iMac(s)
  ▪ For Software
  ▪ For Project Video
• Other Device(s)
  ▪ MacBook Pro
  ▪ Tablets
  ▪ Phones
• Poster
  ▪ DD Booklet Page
  ▪ Provided by Dr. D.

Team Evolutio
ERP Air Force: Drone Elephant Recognition and Tracking
Families
Middle and High School Students
Design Day Awards

• Awards
  ▪ Auto-Owners Exposition Award
  ▪ MSUFCU Praxis Award
  ▪ TechSmith Screencast Award
  ▪ Amazon Sigma Award

• Conferred By
  ▪ Panel of Judges
  ▪ See http://www.capstone.cse.msu.edu/design-day/awards/#panel-of-judges

• Based On
  ▪ Project Plan
  ▪ Project Video
  ▪ Design Day
Team Evolutio Wins Amazon Sigma Award
Design Day and the Project Video

✓ Design Day

➢ Project Video

• What’s ahead?
Project Video

• Tells Project Story
  ▪ Your Project Sponsor / Client
  ▪ The “Problem”
  ▪ Your “Solution”
    o Use Case(s)
      ❖ Two Or Three
      ❖ How will your sponsor use your software?
    o Avoid “Boring” Stuff
      ❖ Account Creation
      ❖ Login Screen
      ❖ “Boring” Administration Details
      ❖ Every Last Feature and Option
      ❖ Zzz...
    o Technical Details
      ▪ Acknowledgements
  ❯ Don’t forget. Like Design Day Booklet
• ~10 Minutes in Length
  ▪ Little wiggle room on time
• Professional
• Lots of Work
Project Video How To

• Story Board
  ▪ Plan Video and Audio
  ▪ Very Specific
• Capture Audio (Voice-Over)
  ▪ Write Script
  ▪ Record Using “Good” Microphones
• Capture Video
  ▪ Screen Video or Shots
  ▪ Photographs
  ▪ Digital Video
  ▪ (While Listening to Audio?)
Project Video How To

• Edit
  – Video
  – Audio
  – Use
    o Camtasia
      ❖ Use MSU Site License
      ❖ See https://www.techsmith.com/tutorial-camtasia.html
    o Other Software of Your Choice

• Produce .mp4
Project Video How To

To Do...

• Collect Assets
  ▪ Audio
    o Record Voice-Over
    o Background Music (If Any)
  ▪ Video
    o Screen Recordings using Camtasia
    o Digital Video
    o Digital Photographs

• Import, Assemble and Edit Assets with Camtasia
  ▪ Put All Assets in One Project Folder
  ▪ Use (At Least) Three Tracks
    o Video
    o Audio for Voiceover
    o Audio for Music

• Produce
  ▪ Test Parts and Pieces in Advance
    o For Look and Feel
    o For Readability
  ▪ Produce Entire Video
    o In Advance
    o Preview Entire Video Before Submitting
Project Video Hints

• Look at Previous Videos
  ▪ See Archives > Websites By Semester
  ▪ See Design Day > Awards
    o TechSmith Screencast Award
    o Amazon / Urban Science Sigma Award

• Voiceover
  ▪ We have a few microphones that you may borrow.
  ▪ Record Mary Had a Little Lamb
  ▪ Import into Camtasia
  ▪ Audio Can Be Split and Moved
    o Record with Gaps of Silence
    o If Mistake, Start Over at Previous Gap

• Background Music
  ▪ Make Sure Voice-Over Much Louder
  ▪ Test in Meeting Room Setting
  ▪ Always Err on Side of Too Soft Music
  ▪ (Always a Problem with One Video)
Project Video Hints

• Reading App Text
  ▪ Often a Problem
  ▪ Use Very High Resolution and Pan/Zoom Feature of Camtasia
  ▪ Test In Advance
  ▪ In Room Setting
• Audio
  ▪ Ensure Voiceover is Louder than Background Music
  ▪ Do NOT test wearing headphones.
• Rendering
  ▪ Try Samples
  ▪ In Advance
  ▪ Takes a Long Time
  ▪ Do NOT Press Render Button One Hour Before Due
• Due
  ▪ By Midnight, Sunday, December 3 ← Nota Bene
  ▪ Uploaded to Microsoft Teams General Channel File Space
• Posted Immediately for Project Sponsors

Should be written script, even for demos.

Should not be ad lib.

Do not keep saying “I’m going to go ahead and...”
Project Videos

• See Archives > Websites By Semester
• See Design Day > Awards
  ▪ TechSmith Screencast Award
  ▪ Amazon / Urban Science Sigma Award
• Examples
  ▪ Ford
    SYNC Calendar
  ▪ Team Herman Miller
    Scout 2.0: Dynamic Data Visualization for Dealers
  ▪ Team Amazon
    Amazon Web Services: AWSome Availability Zones
Design Day and the Project Video

- Design Day

- Project Video

- What’s ahead?
What’s ahead?

- 10/26, Th: Design Day and the Project Videos
- 10/31, Tu: Garret Gaw, Amazon
- 11/02, Th: Toby Hall, Roosevelt Innovations
- 11/07, Tu: Ethics and Professionalism
- 11/09, Th: Team Status Report Presentations
- 11/14, Tu: Team Beta Presentations
- 11/16, Th: Team Beta Presentations
- 11/21, Tu: Team Beta Presentations
- 11/23, Th: Thanksgiving
- 11/28, Tu: Team Status Reports
- 11/30, Th: Dr. Micah Lissy
What’s ahead?

• 12/03, Su: Project Videos Due
• 12/05, Tu: Watch Project Videos
• 12/06, We: All Deliverables Due
• 12/06, We: Team Evaluation Forms Due
• 12/07, Th: Design Day Setup
• 12/07, Th: Watch Project Videos
• 12/08, Fr: Design Day
• 12/13, We: Capstone Wrap Up
  (10:00 a.m. – 12:00 p.m.)
What’s ahead?

• MAPP Points ← Nota Bene
  ▪ Design Day
    o Slightly Late / Dress / Participation -0.5 to -5.0
    o Very Late or Skip -5.0 and – Team Contribution Points
  ▪ Last Week of Meetings
    o Tuesday -5.0
    o Thursday -5.0
  ▪ Last Meeting During Exam Week -5.0
Design Day and the Project Video

✓ Design Day

✓ Project Video

✓ What’s ahead?