# MICHIGAN STATE UNIVERSITY

# 10/23:

# Design Day and the Project Video

#### The Capstone Experience

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Spring 2025



## Design Day and the Project Video

➤ Design Day

Project Video



#### Design Day Overview

- Engineering Building
- Friday, December 5, 7:00 a.m. 2:30 p.m.
- Exhibits of Design Projects
  - From Entire College of Engineering
  - Open to the Public
  - Visitors Include
    - Faculty
    - Family and Friends
    - Corporate Sponsors
    - Middle and High School Students
- Dress is Business



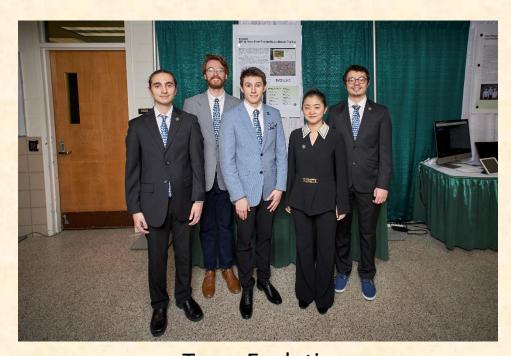
#### Design Day Activities

- Design Day Setup, Thursday, December 4
  - 3<sup>rd</sup> Floor Engineering Building
  - 1:00 p.m. 2:30 p.m.
- Design Day, Friday December 5
  - 07:00 a.m. Setup
  - 08:00 a.m. Team Exhibits
  - 12:01 p.m. Tear Down and Lunch
  - 01:15 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



**Corporate Clients** 

#### Design Day Awards

- Awards
  - Auto-Owners Exposition Award
  - MSU Federal Credit Union Praxis Award
  - TechSmith Screencast Award
  - Amazon Sigma Award
- Conferred By
  - Panel of Judges
  - See <a href="http://www.capstone.cse.msu.edu/design-day/awards/#panel-of-judges">http://www.capstone.cse.msu.edu/design-day/awards/#panel-of-judges</a>
- Based On
  - Project Plan
  - Project Video
  - Design Day





Team Vectra Al Wins Amazon Sigma Award

## Design Day and the Project Video

✓ Design Day

➤ Project Video



#### Project Video

- Similar to Design Day Booklet Project Page
- Tells Project Story
  - Your Project Sponsor / Client
  - The "Problem"
  - Your "Solution"
    - Use Case(s)
      - Two Or Three
      - How will your sponsor use your software?
      - Marshall Plan: What, So What, Now What
    - Avoid "Boring" Stuff
      - Account Creation
      - Login Screen
      - "Boring" Administration Details
      - Every Last Feature and Option
      - ❖ Zzz...
  - Technical Details ←Don't forget. Like Design Day Booklet
  - Acknowledgements
- ~8 Minutes in Length
  - Little wiggle room on time
- Professional
- Lots of Work



[1 of 3]

- 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?)



[2 of 3]

- Edit
  - Video
  - Audio
  - Use
    - Camtasia
      - ❖ Use MSU Site License
      - ❖See <a href="https://www.techsmith.com/tutorial-camtasia.html">https://www.techsmith.com/tutorial-camtasia.html</a>
    - Other Software of Your Choice
- Produce .mp4



#### To Do...

- Collect Assets
  - Audio
    - Record Voice-Over
    - Background Music (If Any)
  - Video
    - Screen Recordings using Camtasia
    - Digital Video
    - Digital Photographs
- Import, Assemble and Edit Assets with Camtasia
  - Put All Assets in One Project Folder
  - Use (At Least) Three Tracks
    - o Video
    - Audio for Voiceover
    - Audio for Music
- Produce
  - Test Parts and Pieces in Advance
    - For Look and Feel
    - For Readability
  - Produce Entire Video
    - In Advance
    - Preview Entire Video Before Submitting



[1 of 2]

- Look at Previous Videos
  - See Archives > Websites By Semester
  - See Design Day > Awards
    - TechSmith Screencast Award
    - 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
    - Record with Gaps of Silence
    - 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)



[2 of 2]

- 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, November 30 — Nota Bene
  - Uploaded to Microsoft Teams General Channel File Space
- Posted Immediately for Project Sponsors

Should be written script, even

for demos.

Should <u>not</u> 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 TechSmith
     ACE: Automated Content Editor
  - Team Amazon
     Amazon Web Services: AWSome Availability Zones



## Design Day and the Project Video

✓ Design Day

✓ Project Video



- Upcoming Meetings and Due Dates
  - **■** 10/21, Tu: October Break
  - **■** 10/23, Th: Design Day and the Project Video
  - 10/28, Tu: Rick Grubb
  - 10/30, Th: Dr. Micah Lissy
  - 11/04, Tu: Conner Bean
  - 11/06, Th: Ethics and Professionalism
  - 11/11, Tu: Beta Presentations ←2.5 Weeks
    - Software Feature Complete
    - All Technical Contributions Due ← Past Betas Do Not Count
    - Finishing Touches on Software
    - Creating Project Video
  - 11/13, Th: Beta Presentations



Finishing Touches on Software

Creating Project Video

- Upcoming Meetings and Due Dates
  - 11/18, Tu: Beta Presentations
  - 11/20, Th: Beta Presentations
  - 11/25, Tu: Project Video Status Reports ← New
  - 11/27, Th: Thanksgiving
  - 11/30, Su: Project Videos Due ←3 Days After Thanksgiving
  - 12/02, Tu: All-Hands / Project Videos
  - 12/03, We: All Deliverables Due
  - 12/04, Th: Design Day Setup / 1:30 p.m. 3:00 p.m.
  - 12/04, Th: All-Hands / Project Videos
  - 12/05, Fr: Design Day / 7:00 a.m. 2:30 p.m.
  - 12/10, We: Capstone Wrap Up / 10:00 a.m. 12:00 p.m.



#### Design Day Booklet

- Proofs
  - While !Perfect {
     Tim Creates PDF
     Dr. D. Posts pdf and Requests Feedback
     Teams Email Feedback to Dr. D.
     Dr. D. Submits Edits to Tim
     }
- Feedback
  - SubjectTeam [team-name]: DD Booklet Feedback Round [Round]
  - Feedback
    - Very Specific
    - Paragraph m, Line n: Change "...Dr. Dirkson..." to "...Dr. Dyksen...". That is replace "Dirkson" with "Dyksen".
  - Artwork Updates
    - Next Week
    - o Dr. D. will send email.



[1 of 2]

- Start
  - November 11
  - 2.5 Weeks From Today
- Demonstrate Working
  - Software
  - Hardware
- 100% Feature Complete ← Note
- 10% of Final Grade
- Test
  - Everything
  - In Presentation Room
  - In Advance
- Nota Bene:

New code submitted after a team's Beta Presentation will not be counted as a Technical Contribution



#### Outline

- Brief Project Overview (Elevator Pitch)
- (Skip Architecture Diagram and Screen Shots Slides)
- Software Demonstration
  - Three Use Cases
  - Follow Marshall Plan
    - » What
    - » So What
    - » Now What ← Nota Bene
- OBrief Summary of What's left to do?
- Use Entire 15 Minutes

