

MICHIGAN STATE
U N I V E R S I T Y

11/01:

Design Day and the Project Video

The Capstone Experience

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From Students...
...to Professionals

Design Day and the Project Video

- Design Day
 - Project Video
 - What's ahead?

Design Day Overview

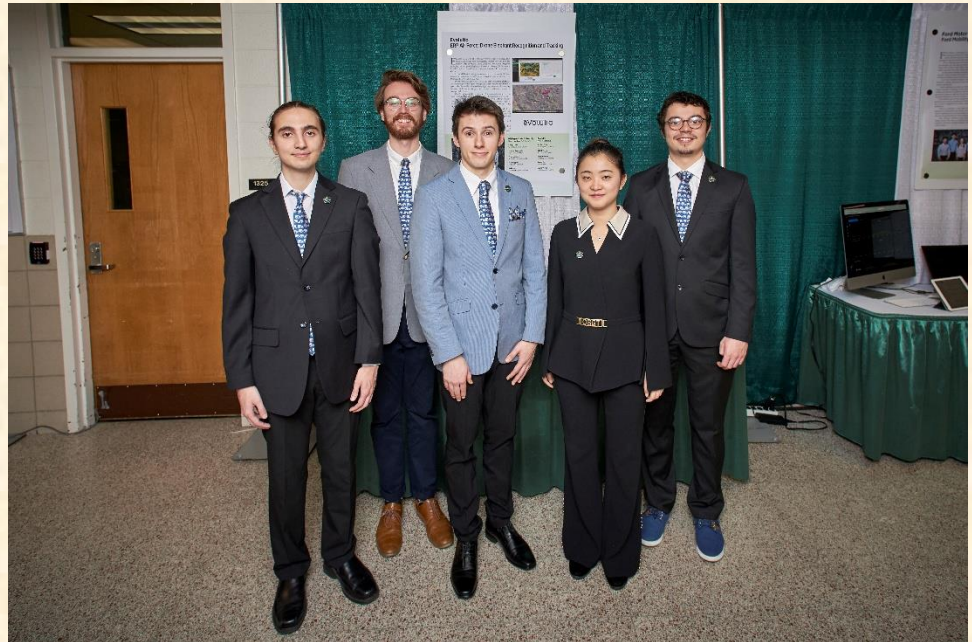
- Engineering Building
- Friday, December 9, 7:00 a.m. – 2:30 p.m.
- Exhibits of Design Projects
 - From Entire College of Engineering
 - Open to the Public
 - Visitors Include
 - Faculty
 - Family and Friends
 - Corporate Sponsors
 - Middle and High School Students
- Dress is Business

Design Day Activities

- Design Day Setup, Thursday December 8
 - 3rd Floor Engineering Building
 - 1:00 p.m. – 3:00 p.m.
- Design Day, Friday December 9
 - 7:00 a.m. Setup
 - 7:30 a.m. Team Photos
 - 8:00 a.m. Team Exhibits
 - 12:01 p.m. Tear Down and Lunch
 - 1:15 p.m. Awards Ceremony
 - 2:30 p.m. Capstone Gathering
 - All-Hands
 - Families and Friends
 - Judges
 - Corporate Visitors

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



CoE Dean and MSU Board of Trustees Member

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”
 - Use Case(s)
 - Avoid “Boring” Stuff
 - ❖ Account Creation
 - ❖ Login Screen
 - ❖ “Boring” Administration Details
 - ❖ Every Last Feature and Option
 - ❖ Zzz...
 - Technical Details
 - Acknowledgements
- ~12 Minutes in Length
- Professional
- Lots of Work

←Don't forget. Like Design Day Booklet

Project Video How To

[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?)

Project Video How To

[2 of 3]

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

Project Video How To

[3 of 3]

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
 - 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

Project Video Hints

[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)

Project Video Hints

[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.

Should be written script, even for demos.
- Rendering
 - Try Samples
 - In Advance
 - Takes a Long Time
 - Do NOT Press Render Button One Hour Before Due

Should not be ad lib.

Do not keep saying “I’m going to go ahead and...”
- Due
 - By Midnight, Sunday, December 4 ← **Nota Bene**
 - Uploaded to Microsoft Teams General Channel File Space
- Posted Immediately for Project Sponsors

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?

[1 of 4]

- ~~11/01, Tu: Design Day and the Project Videos~~
- 11/03, Th: Garret Gaw, Vice President, Amazon
- 11/08, Tu: Ethics and Professionalism
- 11/10, Th: Team Status Report Presentations
- 11/15, Tu: Team Beta Presentations
- 11/17, Th: Team Beta Presentations
- 11/22, Tu: Team Beta Presentations
- 11/24, Th: Thanksgiving
- 11/29, Tu: Team Status Report Presentations
- 12/01, Th: Team Status Report Presentations

What's ahead?

[2 of 4]

- 12/04, Su: Project Videos Due
- 12/06, Tu: Watch Project Videos
- 12/07, We: All Deliverables Due
- 12/07, We: Team Evaluation Forms Due
- 12/08, Th Design Day Setup
- 12/08, Th: Watch Project Videos
- 12/09, Fr: Design Day
- 12/14, We: Capstone Wrap Up
(10 a.m. – 12:00 p.m.)

What's ahead?

[3 of 4]

- Design Day Booklet
 - Updated Artwork
 - Must...
 - ❖ ...be updated image of “same thing.”
 - ❖ ...have identical aspect ratio.
 - ❖ ...be named identically.
 - Booklet Production Process
 - Do While NumberOfErrors != 0 {
 - Post PDF from graphic designer.
 - Find and document errors.
 - Send errors to graphic designer.
 - }
 - Proof Status
 - Proof PDF Round 01 Posted on Downloads Page
 - Check everything carefully.
 - Email me corrections.
 - ❖ Very Specific Instructions
 - ❖ Scanned Page?
 - Due by Midnight Tonight

What's ahead?

[4 of 4]

- MAPP Points
 - Design Day
 - Slightly Late / Dress / Participation -0.5 to -5.0
 - Very Late or Skip -5.0 and – Team Contribution Points
 - Last Week of Meetings
 - Tuesday -5.0
 - Thursday -5.0
 - Last Meeting During Exam Week -5.0

Design Day and the Project Video

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- ✓ What's ahead?