MICHIGAN STATE UNIVERSITY



10/31: Design Day and the Project Video

The Capstone Experience

Dr. Wayne Dyksen

Department of Computer Science and Engineering Michigan State University

Fall 2016



From Students... ...to Professionals

What's ahead?

- Week 10
 - 10/31: Design Day and the Project Video
 - 11/02: Camtasia Demo
- Week 11
 - 11/07: Intellectual Property
 - 11/09: Ethics and Professionalism
- Weeks 12
 - 11/14: Beta Presentations
 - 11/16: Beta Presentations
- Week 13
 - 11/21: Beta Presentations
 - 11/23: Team Status Reports
 - 11/24: Thanksgiving



Email legitimate conflicts by November 11. If you've already emailed me a conflict, <u>email it again</u>.

[1 of 2]

What's ahead?

• Week 14

- 11/28: Beta Presentations
- 11/30: Team Status Reports
- Week 15
 - 12/05: Project Videos
 - 12/07: Project Videos and All Deliverables
 - 12/08: Design Day Setup
 - 12/09: Design Day
- Week 16
 - 12/15: Project Videos
 - EB 1145, 3:00 p.m. 5:00 p.m.

[2 of 2]

Design Day Overview

- Engineering Building
- Friday, December 9, 6:30am 2:30pm
- 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

- 6:30 a.m. Setup and Breakfast
- 7:00 a.m. All-Hands Photo
- 7:30 a.m. 11:45 a.m. Presentations to Judges
 - See <u>Schedule</u>
 - Room 3405
- 7:30 a.m. 12:30 p.m. Team Exhibits
- 12:00 p.m. Free Lunch
- 12:30 p.m. Tear Down
- 1:15 p.m. Awards Ceremony
- 2:30 p.m. Capstone Gathering
 - All-Hands
 - Families and Friends
 - Judges
 - Corporate Visitors





CSE Students Ready to Go at 7:00am

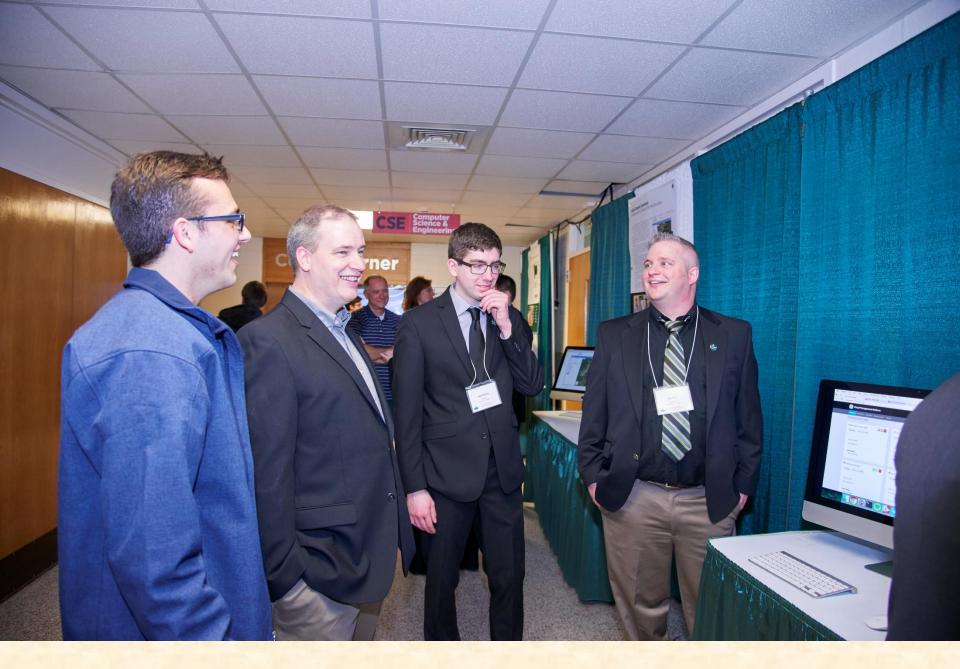
Team Exhibit

- Table
- iMac(s)
 - For Software
 - For Project Video
- Other Device(s)
 - MacBook Pro
 - iPhone/iPad
 - Android
- Poster
 - DD Booklet Page
 - Provided by Dr. D.





Families



Alumni



Middle and High School Students



Corporate Clients



Faculty



MSU Board of Trustees Member



The Media



Dean Leo Kempel

Design Day Awards

<u>Awards</u>

- Auto-Owners Exposition Award
- MSUFCU Praxis Award
- TechSmith Screencast Award
- Urban Science Sigma Award
- ~16 <u>Judges</u>
- Based On
 - Project Plan (Due November 7)
 - Project Video
 - Design Day
 - Exposition
 - Presentation to Judges



Presenting to Judges



Presenting to Judges



Team Union Pacific Wins Urban Science Sigma Award

Project Video

- Tells Project Story
 - Your Client
 - The "Problem"
 - Your "Solution"
 - Use Case(s)
 - Avoid "Boring" Stuff
 - Account Creation
 - Login Screen
 - "Boring" Administration Details
 Zzz...
 - Technical Details
 - Acknowledgements
- ~10 Minutes in Length
- Professional
- Lots of Work

Don't forget. Like Design Day Booklet.



Project Video How To

- Story Board
 - Plan Video and Audio
 - Very Specific
- Capture Audio (Voice-Over)
 - Write Script
 - Record in Telecomm Sound Studio
- Capture Video
 - Screen Video or Shots
 - Photographs
 - Digital Video
 - (While Listening to Audio?)

[1 of 3]

Project Video How To

- Edit
 - Video
 - Audio
 - Use
 - o Camtasia

Other Software of Your Choice

- Produce
 - .mp4 (Required)
 - .mov (Optional)

[2 of 3]

Project Video How To

To Do...

- Collect Assets
 - Audio
 - Record Voice-Over
 - Background Music (If Any)
 - Video
 - o Camtasia
 - Digital Video (with Capstone Camera)
 - 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

[3 of 3]

Project Video Hints

[1 of 2]

- Look at Previous Videos
 - See <u>Archives > Websites By Semester</u>
 - Look at Previous Videos
- Voiceover
 - Try TeleCom Recording Studio ASAP
 - Figure Out
 - How to Sign Up
 - ✤ Where It Is
 - How To Use It
 - 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 Room Settings (Like 2400 EB)
 - 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 (Like 1145 EB)
- Rendering
 - Try Samples
 - In Advance
 - Takes a Long Time
 - Do NOT Press Render Button One Hour Before Due
- Due
 - By 2pm on Monday, December 5
 - Via USB Stick to Dr. D. in Office
- Posted Immediately for Judges

Project Videos

- See <u>Archives > Websites By Semester</u>
- See Design Day > Awards
 TechSmith Screencast Award
- Examples
 - Meijer

Mobile Location-Based Product Promotion

Whirlpool

Launder: Laundry Room Tablet Payment System

Amazon <u>SIFT: Seller-Forums Information Filtering Tool</u>

The Capstone Experience