

**Google Form  
Attendance Check**

↑↑↑↑↑↑↑↑  
Only An Example

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

**11/01:**

# **Design Day and the Project Video**

## **The Capstone Experience**

Dr. Wayne Dyksen  
James Mariani  
Luke Sperling

Department of Computer Science and Engineering  
Michigan State University

Fall 2021



*From Students...  
...to Professionals*

# All-Hands Meeting

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- Design Day Exhibition In Person
- Design Day Awards Ceremony In Teams
- Project Video
- What's ahead?

# Design Day Overview

- Engineering Building
- Friday, December 10, 7:00 a.m. – 12:30 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 COVID Modifications

- Limited to Capstone Courses
  - Civil and Environmental Engineering
  - CSE
  - ECE
  - ME
- Spread Throughout Engineering Building
  - Civil: First Floor Classroom
  - ME: First Floor Hallways
  - ECE: Second Floor Hallways
  - CSE: Third Floor Hallways
- No Food
- No College-Wide Awards Ceremony
- Attendance Expected if in Michigan
  - 120/128 CSE498 Students in Michigan
  - 099/128 CSE498 Students in Greater Lansing

# Design Day Activities

- Thursday, December 9
  - 2:00 p.m. –
  - Initial Setup
    - Cabling
    - Poster
    - Testing ← **Make sure Lab iMacs are configured.**
- Friday, December 10
  - 7:00 a.m. Setup
  - 8:00 a.m. - 12:00 p.m. Team Exhibits
  - 12:00 p.m. Tear Down

# Team Exhibit

- Table
- iMac(s)
  - For Software
  - For Project Video
- Other Device(s)
  - Hardware
  - PC
  - Oculus Rifts
  - Tablets
  - Phones
- Poster
  - DD Booklet Page
  - Provided by Dr. D.







Families





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
- Awarded By
  - Dr. D., James and Luke
  - Corporate Judges?
- Based On
  - Beta Presentation ← **Note**
  - Project Plan
  - Project Video
  - Design Day







Team MSU ITS Wins Urban Science Sigma Award



# All-Hands Meeting

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# Design Day Award Selection

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- Awarded By
  - Dr. D., James and Luke
  - Judges?
- Based On
  - Beta Presentation
  - Project Plan
  - Project Video
  - Design Day

# Online Awards Ceremony When and Where

- Date & Time
  - NOT Friday, December 10
  - During Final Exam Time Slot
  - Friday, December 17, 7:45 a.m. – 9:45 a.m. ET
- Microsoft Teams General Channel
  - All-Hands
  - Project Sponsors



# Design Day Awards Ceremony Agenda

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- Opening Remarks
- For Each Award
  - Describe Award
  - Announce Award Winning Team
  - Watch Award Winner's Project Video
- Capstone Wrap-Up

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# 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
- ~10 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?)

**Google Form  
Attendance Check**

# 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**
    - 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
    - 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
  - Instructors 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 Microsoft Teams 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 Microsoft Teams
- 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 5
  - 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
  - United Airlines Training  
[Tech Ops Training Content Management System](#)
  - Team Michigan State University ITS  
[Degree Navigator](#)
  - Team Herman Miller  
[Scout 2.0: Dynamic Data Visualization for Dealers](#)



# All-Hands Meeting

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# What's ahead?

[1 of 2]

- All-Hands Meetings
  - ~~11/01: M Design Day and the Project Videos~~
  - 11/03: W Team Status Report Presentations
  - 11/08: M Intellectual Property
  - 11/10: W Ethics and Professionalism
  - 11/15: M Team Beta Presentations
  - 11/17: W Team Beta Presentations
  - 11/22: M Team Beta Presentations
  - ~~11/24: W Team Status Report Presentations~~
  - 11/29: M Team Status Report Presentations
  - 12/01: W Team Status Report Presentations
  - 12/05: S Project Videos Due by Midnight
  - 12/06: M Project Videos
  - 12/08: W Project Videos and All Deliverables
  - 12/09: T Design Day Setup
  - 12/10: F In-Person Design Day (7:00 a.m. – 12:00 p.m.)
  - 12/17: F On-Line Design Day Awards Ceremony (7:45 a.m. – 9:45 a.m.)





# What's ahead?

[2 of 2]

- Design Day Booklet Content
  - Proof Status
    - Proof PDF Round 03 Posted
    - Check it out. You never know...
  - Paragraph Indent Errors
  - Overall Process
    - Hard and Important Work
    - Good work! Thanks!
  - Finding Errors Points
    - Rewards for Finding Errors: +0.2/Error
    - Penalties for Missing Error: -0.0/Error

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