

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



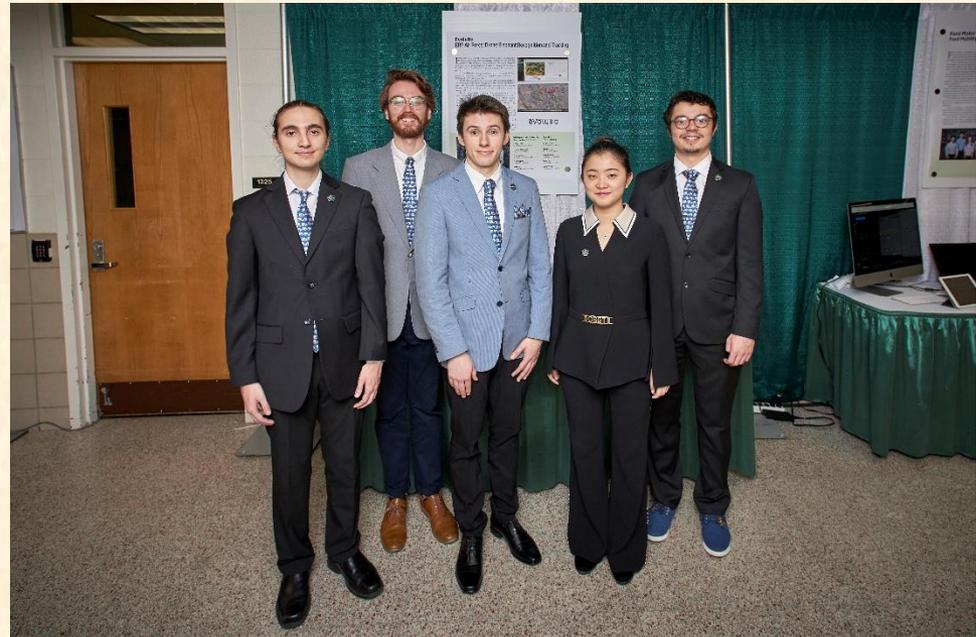
Design Day Activities

- 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



Michigan State University ITS Group Project Organization and Scheduling

Michigan State University is a public research university founded in 1855. The goal of its Information Technology Services unit is to deliver and maintain effective technology resources for students, faculty and staff.

All students regularly take part in group projects. This is increasing because finding the best way to communicate, writing up meeting notes, and managing resources for the project is very difficult.

Our Group Project Organization and Scheduling app reduces the stress of these tasks in a quick and simple way by allowing users to create a group, notify all members and connect with any services they find useful for their project.

The user simply clicks to create the group, invite members, set one, and the tasks selected are automatically assigned. A group profile is created, including a shared meeting, shared tasks, and suggested tasks the group may find useful.

The main feature of our app is the ability to schedule meetings based on a user's shared calendar, whether it is Google Calendar or Outlook's calendar.

The scheduling algorithm finds available times from the individual calendars and proposes times which work for all or most members. Also approved by a group member, meeting times are added to a list of scheduled meetings.

Our next step is to build the business model and offer a business solution to other universities. Initial discussions are in progress with other universities. Initial discussions are in progress with other universities. Initial discussions are in progress with other universities.



- Michigan State University ITS
Project Sponsors
- J.J. Doherty, Michigan State University
 - Mark McCarty, Michigan State University
 - Jonathan Ottaviano, Michigan State University
 - Mike Summers, Michigan State University

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**

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- ✓ What's ahead?