MICHIGAN STATE UNIVERSITY

03/17: Design Day and the Project Video

The Capstone Experience

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Spring 2026



From Students…
…to Professionals

Design Day and the Project Video

- Design Day

- Project Video



Design Day Overview

- Engineering Building
- Friday, April 24, 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 Setup

- When and Where ←Put on Calendar
  - Thursday, April 23, 1:00 p.m. – 2:30 p.m.
  - 3rd Floor Engineering Building
  - Meet in Capstone Labs
- What
  - Find Team Table (in Hallway)
  - Get and Setup Easel and Poster
  - Ensure Electrical Power
  - Setup and Test All Systems
- Who
  - Every Team Member Expected
  - Key Team Members Required
- Why
  - Mitigate All Problems in Advance
  - Be the Best Program



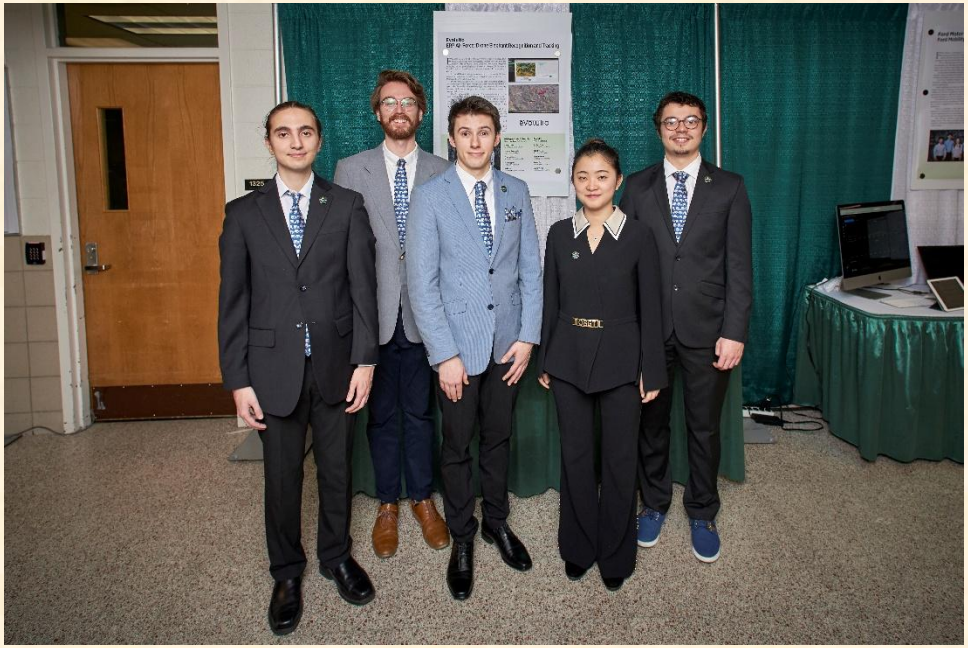
Design Day Activities

- 07:00 a.m. Setup
  - Late: Up to -5 MAPP Points
  - Very Late: -5 MAPP Points
- 07:30 a.m. Team Photos
- 08:00 a.m. Team Exhibits
- 12:01 p.m. Tear Down and Lunch
- 01:15 p.m. Awards Ceremony
  - Missing: -5 MAPP Points
  - Dressed Inappropriately: Up to -5 MAPP Points



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

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 http://www.capstone.cse.msu.edu/design-day/awards/#panel-of-judges
- Based On
  - Project
    - Plan
    - Software
    - Video
  - Design Day Performance





Team Vectra AI 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



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 Room Setting
  - Always Err on Side of Too Soft Music
  - Too Loud Often a Problem



Project Video Hints

[2 of 2]

- Reading App Text
  - Often a Problem
  - Use Very High-Resolution Video with 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, April 19← 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
  - Team Amazon
    Amazon Web Services: AWSome Availability Zones
  - Ford
    SYNC Calendar
  - Team Launch
    My VR Language Tutor



Design Day and the Project Video

- ✓Design Day
- ✓Project Video

What's ahead?

[1 of 2]

- Upcoming Meetings and Due Dates
  - ~~W10, 03/17,Tu: Design Day and the Project Video~~
  - W10, 03/19,Th: Rick Grubb
    - Director of Applications and Innovation
    - General Dynamics Land Systems
  - W10, 03/19,Th: Artwork Updates ←See Email
  - W11, 03/24,Tu: Resume Writing and Interviewing
  - W11, 03/26,Th: Conner Bean
  - W12, 03/31,Tu: Garret Gaw
    - Vice President, Software Engineering
    - Walmart
  - W12, 04/02,Th: Beta Presentations ←2.0 Weeks
  - W12, 04/02,Th: Start on Project Video ←Note



What's ahead? [2 of 2]

- Upcoming Meetings and Due Dates
  - W13, 04/07,Tu: Beta Presentations
  - W13, 04/09,Th: Beta Presentations
    - Finishing Touches on Software
    - Creating Project Video
  - W14, 04/14,Tu: Project Video Status Reports
  - W14, 04/16,Th: Intellectual Property
  - W15, 04/19,Su: Project Videos Due ←Note a Sunday
  - W15, 04/21,Tu: Project Videos / Split-Hands
  - W15, 04/22,We: All Deliverables Due
  - W15, 04/23,Th: Project Videos / Split Hands
  - W15, 04/23,Th: Design Day Setup
  - W15, 04/24,Fr: Design Day
  - W16, 04/30,Th: Capstone Wrap Up Time
    5:45 p.m. — 7:45 p.m. ←Put on Calendar



Meeting Attendance, Preparation & Participation (MAPP) [4 of 6]

- Almost No Excuses Accepted
  - One or Two Excused Possible for Interviews
    (Many are remote. Schedule them around Capstone.)
  - Must Provide Information
    - Date, Company, Recruiter Name & Contact Info
    - In Advance
    - To Instructors
- Must Attend (No Excuses Accepted)
  - Your Team Presentations
  - All Project Video Viewing
  - Design Day
  - Capstone Wrap Up
- Read the syllabus.
  - Meeting Attendance, Preparation and Participation (MAPP) Grade
  - Meeting Attendance Policies and Procedures

Do NOT schedule interviews.
Do NOT schedule ANYTHING.
Do NOT buy plane tickets. ←Note

-5.0 MAPP Points Per Absence



Artwork Updates

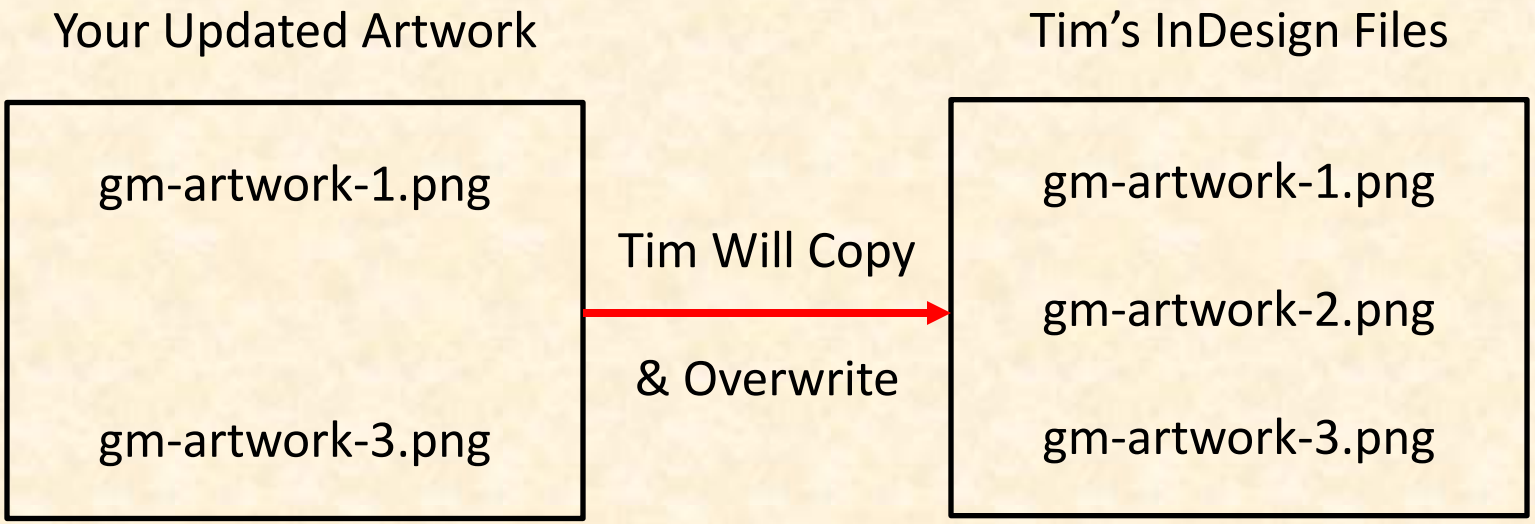
[1 of 5]

Think!

WWTD == “What Will Tim Do”

Key

InDesign does NOT embed artwork, it links to the png files.



Artwork Updates

[2 of 5]

- If NOT Submitting Do NOTHING!
- If Submitting…
  Read Email Instructions Carefully
  - Download Assets Zip File
  - Replace Updated Artwork png Files
  - Delete Non-Updated Artwork png Files
  - Update Artwork in docx File
  - Document Updates in docx File
  - Create Updated Assets Zip File
  - Upload Updated Assets Zip File



Artwork Updates

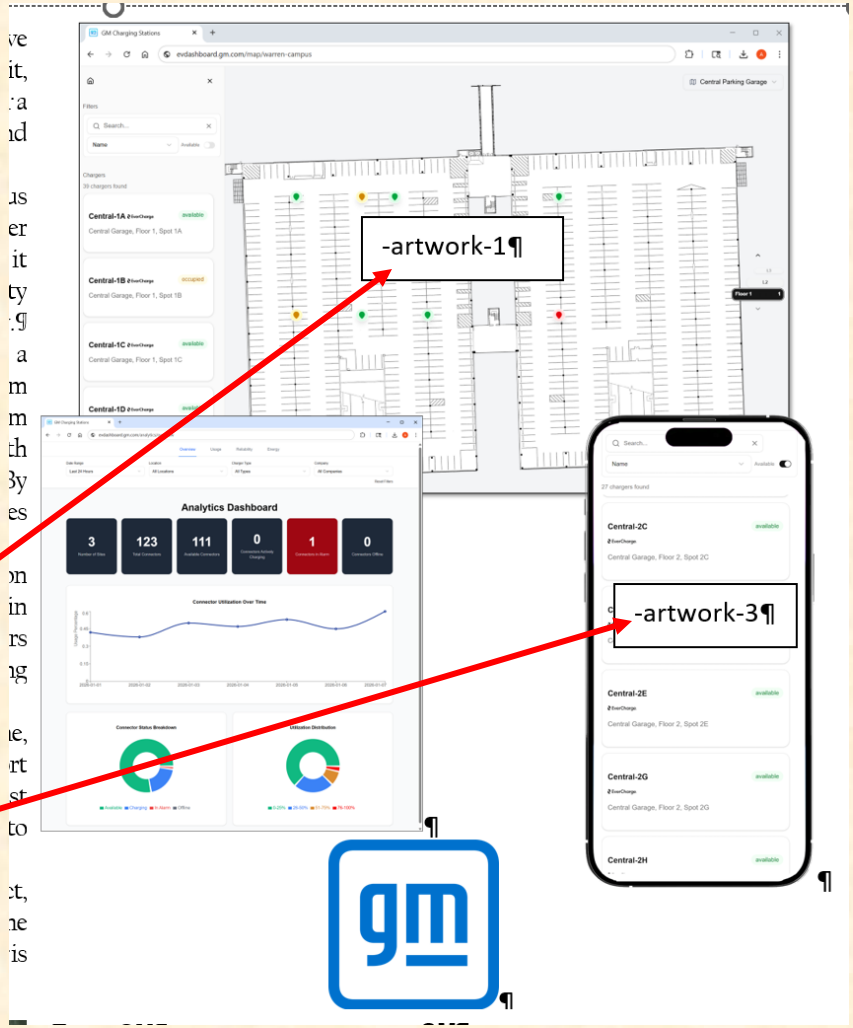
[3 of 5]

- Updated Artwork Must
  - Be Very High Resolution
  - Match Exactly
    - Filename
    - Type
      - Desktop App
      - Web App
      - Mobile
    - Aspect Ratio
  - Have Whitespace Cropped
  - NOT Have Borders Added
    (Contradicts Initial Email Instructions)



Artwork Updates

- Documenting
  - Update your docx file.
  - Create textbox and place overtop of updated artwork.
  - Identify the artwork with shortened filenames.
    - -artwork-1
    - -artwork-3



Artwork Updates

[5 of 5]

- Create Assets Zip File
  - docx File with Updated Artwork
  - Include Only Updated png Files
  - Delete png Files NOT Being Updated
- Upload Assets Zip File to Teams File Space
- Due by Midnight, Thursday, March 19

