

# 01/14, 01/16: Capstone Overview

## The Capstone Experience

Dr. Wayne Dyksen

Professor James Mariani

Department of Computer Science and Engineering

Michigan State University

Spring 2025



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

# Meeting Goals for 01/14 and 01/16

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- 01/14
  - Introduction to Capstone Logistics
  - Overview of Projects
  - Team Member Survey
- 01/16
  - Capstone Logistics
  - What's ahead?

# Capstone Overview

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✓ Course Logistics

✓ Client Projects

➤ **Course Logistics (Continued)**

# Where are we?

- Teams/Projects
  - Assigned
  - Met and Working
- Sponsors/Clients
  - Contacted
  - Scheduled Weekly Meeting
  - Met With Once?
- Luke, Griffin and Sam
  - Heard From
  - Scheduled Weekly Triage Meeting
  - Met With Once?
- Capstone Lab
  - Found It
  - Successfully Logged into Systems and Changed Passwords
  - Began Configuring Systems
- Projects
  - Studying Project Description
  - Exploring and Configuring Technologies
  - Exploring and Configuring Systems
  - Discussed with Client



# About Us

[1 of 2]

- Dr. D.

- Title: Professor of Computer Science and Engineering
- Hometown: North Haledon, New Jersey



- Education: Calvin College (BS), Purdue University (MS, PhD)
- Experience: Professor @ Calvin, Purdue, MSU

- Prof. Mariani

- Title: Professor of Instruction
- Hometown: Sterling Heights, Michigan
- Education: MSU (BS, MS, PhD Candidate)
- Experience: CSE498 Grad, Teaching Assistant, Professor @ MSU



# About Us

[2 of 2]

- Luke Sperling
  - Title: Graduate Teaching Assistant
  - Hometown: Birmingham, Michigan
  - Education: MSU (BS, MS, PhD Candidate)
  - Experience: CSE498 Grad, Teaching Assistant @ MSU
- Griffin Klevering
  - Title: Graduate Teaching Assistant
  - Hometown: South Lyon, Michigan
  - Education: MSU (BS, MS, PhD Candidate)
  - Experience: CSE498 Grad, Teaching Assistant @ MSU
- Samantha (Sam) Kissel
  - Title: Graduate Teaching Assistant
  - Hometown: Clarkston, Michigan
  - Education: MSU (BS, MS Candidate)
  - Experience: CSE498 Grad, Teaching Assistant @ MSU



# Capstone TM Nomenclature

In the spirit of running like a business...

- ~~Teaching Assistant or TA~~
- Team Manager or TM
  - Not Traditional TA Role
  - Not a Tutor
  - Luke, Griffin, Sam == TM
- Dr. D. and Prof. Mariani
  - TMs' Managers
  - Your...
    - Manager's Managers
    - "Skip-Level" Managers



# Capstone Lab Machines

- Depends on Team Needs
  - Two 27" iMacs
  - Optional
    - DECS VM (Servers)
    - PC (Wintel)
- Operating Systems on iMacs
  - Run Latest macOS
  - Install VMware Fusion 13 (It's free.)
  - Create Virtual Machines
    - Windows 11 VM from Instructors
    - Allocate Sufficient Cores and Memory
    - Others as Needed
  - Do not use Apple Boot Camp





# The Capstone Labs

[1 of 2]

- 3340EB, 3352EB, 3358EB
- Security
  - Keep lab doors closed. ← **Note**
  - Do not open doors for strangers.
  - Do not give out the door key code to others.
  - Do not invite non-capstone students to work in the lab with you.
- ~~Wireless~~
  - ~~SSID: CSE498~~
  - ~~Key: ???????~~
  - ~~Intended for Devices Requiring Lab Subnet~~
- Game Playing / Video Watching
  - Not On Monitors Facing Hallway
  - Not If Other Team Members Need Machine



# The Capstone Labs

[2 of 2]

- Do not “maniac” the wires and cables.
- Keep the lab neat and clean.
  - Lived In, Okay.
  - Messy, Not Okay.
- Respect...
  - ...other teams’ spaces.
  - ...shared spaces.
- Garbage Containers
  - Empty the small one by the microwave into a larger one.
  - Put larger ones out in the hall at night if near full.
  - Put back in the lab in the morning if empty.
- Turn the lights out if you’re the last one out.
- Be careful with cabinet drawers; don’t “maniac” them.
- Water Dispensers (Cooler and Fridge) are not connected to a drain.



# Devices From MSU

- For Capstone Project Use Only
- By Team for the Semester
- Includes “General Purpose” Devices
  - iOS
    - iPads
    - iPhones
  - Android
    - Tablet
    - Phone
  - Surface Pro
  - Oculus Rift
  - Something Else
- How do you get them?
  - Ask TM
  - Pick Them Up from TM

If you need something, ask.

For starters, use emulators.



# Devices From Project Sponsors

- Special Purpose Devices
  - Apple Vision Pro
  - Quest
  - iOS or Android Device
  - NVIDIA Jetson
  - Drone
  - Raspberry Pi
  - Etc...
- How do we/you get the devices?
  - Ask sponsor to ship to Dr. D. at MSU  
(USPS Address on Website. > Contact Us)
  - Pickup from Dr. D. and/or TMs
- Where do we keep the devices?
  - In Capstone Lab
  - Locked Cabinet
- How do we return the devices?
  - Return to Instructors
  - Ship via UPS, USPS,...



# Software

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- From MSU
  - macOS / Sequoia
  - Windows 11
  - Office 365
  - Git
- From Sponsor
  - Special Software
  - Cloud Computing



# Expectations & Workload

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- Extremely High For Both
- Your MSU Career Capstone
- Addition to Your Personal Portfolio
- Experience Viewed Like an Internship
- Interview Talking Points
- Leverage Into a Job Offer



# Schedules

- Schedules > Weekly Schedule

- Schedules > Major Milestones

- 01/28: Status Report Presentations
- 02/04,11: Project Plan Presentations
- 02/20,25,27: Alpha Presentations
- 04/01,03: Beta Presentations
- 04/08,10: Beta Presentations
- 04/22,24: Project Videos
- 04/23: All Deliverables
- 04/25: Design Day
- 05/01: Capstone Wrap Up

(10:00 a.m. – 12:00 p.m.)

- Attendance is required.
- No excuses are accepted.
- Do not schedule anything during these times including interviews, travel home, etc.
- Will coordinate with your interviews.
- **Do NOT buy plane tickets to go home.**
- Read the syllabus.



# Team Organization

- Up to Each Team
- Organize into Roles
  - Sponsor/Client Contact
  - Program Manager
  - Developer Roles
    - Web
    - Mobile
    - Back End
    - Front End
    - Etc.
  - Tester
  - Systems Administrator
  - Etc...
- Everyone must make significant technical contributions, including significant software contributions. ← **Fair Warning**





# Team Dynamics

- Key to Success
- Significant Component of Course Grade
- Potential Teammate Problems
  - Not Attending Team Meetings
  - Not Being Involved
  - Not Responding
  - Not Completing Tasks On Time
  - Submitting Poor Work
  - Leaving Work for Others
  - Etc...
- Address Problems Immediately
  - Within Team
  - With Dr. D., Prof. Mariani, Luke, Griffin, Sam
- Be Ready to Discuss During Interviews



# Grading

[1 of 9]

- Team (70%)
  - Project Plan Document & Presentation 10
  - Alpha Presentation 10
  - Beta Presentation 10
  - Project Video 10
  - Project Software & Documentation 30
  - Total 70
- Individual (30%)
  - Technical Contribution 10
  - Team Contribution 10
  - Team Evaluation 05
  - Meeting Attendance, Preparation & Participation 05 ← Can Be Negative
  - Total 30



# Grading

[2 of 9]

- Final Grade Sum Of...
  - Individual Total
  - % of Team Total Based on Team Contribution
- Grand Total =  
(Individual Total)  
+  
(Team Total) \* (Team Contribution) / 10.0
- *Nota Bene*: Your Team Contribution will have a very significant effect on your final grade.



# Grading

[3 of 9]

Effect of Team Contribution					
Technical Contribution	Team Contribution	Team Evaluation	Meeting Attendance	Team Total	Grand Total
10	10	5	5	70	100
10	9	5	5	70	92
10	8	5	5	70	84
10	7	5	5	70	76
10	6	5	5	70	68
10	5	5	5	70	60
10	4	5	5	70	52
10	3	5	5	70	44
10	2	5	5	70	36
10	1	5	5	70	28
10	0	5	5	70	20

*Nota Bene:* Assumes Perfect Score In Every Other Category



# Grading

[4 of 9]

- Every student must earn the following required minimal grades in each grading category.
- Failure to earn the required minimal grades in any of the grading categories is grounds for receiving a final grade of 0.0 for the course.
- Minimal Team Grade Requirements
  - Project Plan Document & Presentation 5.0 / 10.0
  - Alpha Presentation 5.0 / 10.0
  - Beta Presentation 5.0 / 10.0
  - Project Video 5.0 / 10.0
  - Project Software & Documentation 15.0 / 30.0
- Minimal Individual Grade Requirements
  - Technical Contribution 5.0 / 10.0
  - Team Contribution 5.0 / 10.0
  - Team Evaluation 2.5 / 05.0
  - Meeting Attendance, Preparation & Participation 0.0 / 05.0



# Grading

[5 of 9]

Absence does not make your teammates' hearts grow fonder.

- Nonresponsive
  - Email
  - Slack
  - Discord
  - Microsoft Teams Messages
  - Phone
- Miss Meetings
  - All-Hands & Split-Hands
  - Triage
  - Sponsors
  - Team
- Miss Work ← **Key**
  - In Lab and/or Online with Teammates
  - During Sprints
  - Before Major Milestones
- Miss Deadlines
  - Other team members may be forced to do your work.
  - We will tell other team members they... ← **Fair Warning**
    - ...can take over the tasks assigned to you.
    - ...no longer need to assign you any tasks.

NB: Your teammates will be evaluating you weekly and at the middle and the end of the semester.



# Grading

[6 of 9]

- 100% In Person Meetings
  - All-Hands & Split-Hands
  - Triage
  - Team Meetings with Sponsors
  - Team Meetings
- Accommodating Student Schedules
  - Only Reasonably for Class Schedules and Work
  - Not for Students
    - Traveling for Personal Reasons
    - Working  $\geq$  20 Hours Per Week
    - Commuting to Campus



## Unacceptable Excuses for Not Contributing

- My teammates...
  - ...never asked me to do anything.
  - ...never let me do anything.
  - ...mistreated me.
- My features were...
  - ...not included in the project.
  - ...deleted by our client
- I wrote lots of code, but it wasn't included in the project.
- I work 20 hours per week at my job.
- I live 60 minutes from MSU.
- I didn't want to work on this project team.
- I did a lot of research about stuff we never used.
- I was busy interviewing.
- Etc...





# Grading

[8 of 9]

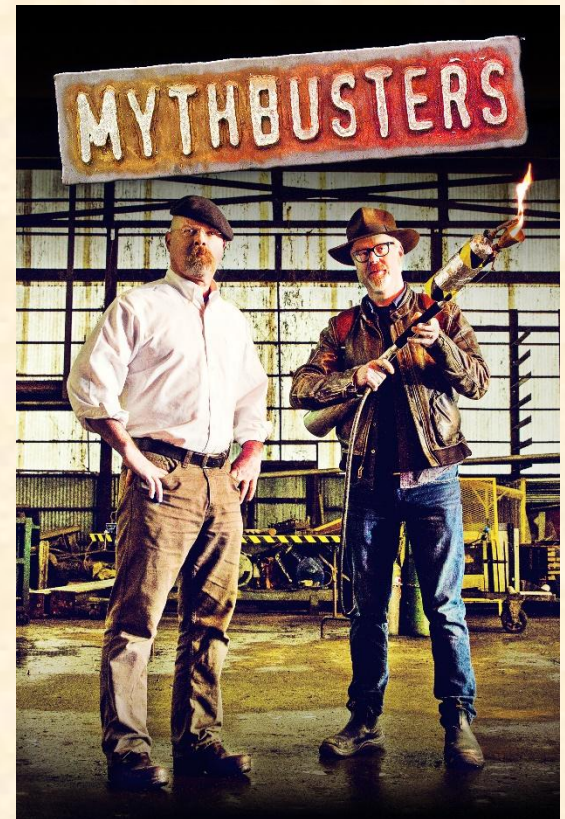
- We reserve the right to make changes with sufficient notice.
- No special consideration will be given for final grades, including but not limited to
  - status in any academic program at MSU including CSE,
  - the need to be graduated this semester,
  - the ability to enroll in CSE498 next semester,
  - financial aid,
  - hours worked in a job while a student at MSU,
  - distance commuting to MSU,
  - anticipated graduation from MSU,
  - acceptance of a job in anticipation of graduation,
  - rank in the armed forces,
  - mortgage on a property,
  - rental lease on a property,
  - upcoming wedding,
  - visa status,
  - or anything else.



# Grading

[9 of 9]

- Number of 0.0's by Semester
  - 2022 F 8
  - 2023 S 12
  - 2023 F 11
  - 2024 S 9
  - 2024 F 8
- Do students fail capstone? Yes



# Meeting Attendance, Preparation & Participation (MAPP) [1 of 6]

## “Meeting-Ready”

- In Person
  - Ready
    - Seated with Team in Correct Room in Assigned Seat
    - Coat and Hat Off
    - All Mobile Devices in Airplane Mode and Stowed
  - Not Ready
    - Entering the Room
    - Walking to a Seat
    - Taking off Coats and/or Stowing Devices
- Online
  - Ready
    - Joined to Microsoft Teams Meeting in Correct Channel
    - In Appropriate Location
  - Not Ready
    - Joined Using Only a Phone
    - In Inappropriate Location (Car, Bar, In Line at the RIV, etc.)



## Attendance Process

- In Person
  - By TM
  - Sign a Form
- Online
  - Microsoft Teams
    - Who
    - When Joined/Left the Meeting
  - Google Forms
    - One or More at Random Time During Meeting
    - One at End of Meeting
    - 60 Seconds to Complete

**Google Form  
Attendance Check**

↑↑↑↑↑↑↑↑  
Only An Example

# Meeting Attendance, Preparation & Participation (MAPP) [3 of 6]

## MAPP Point Deductions

- All-Hands / Split-Hands
  - Meeting-Ready ≤ 3:00:00 p.m.
    - Present
    - -0.0 MAPP Points
  - 3:00:01 p.m. ≤ Meeting-Ready ≤ 3:05:00 p.m.
    - Late
    - -0.5 MAPP Points
  - Meeting-Ready > 3:05:00 p.m.
    - Absent
    - -1.0 MAPP Points
  - Leave Meeting Before Ended by Instructor
    - In Person
      - ❖ Must Swipe Spartan ID Cards with TM, Leaving and Returning
      - ❖ Must Leave and Reclaim Mobile Devices with TM (Approved by University Ombudsperson)
      - ❖ -1.0 MAPP Points if (Fail to Swipe and/or Leave Mobile Devices) or (Extended Period)
    - Online
      - ❖ Miss Google Form (During or At End)
      - ❖ -1.0 MAPP Points
  - Weekly Triage Google Form and Google Slides
    - Late or Not at All
    - -0.5 MAPP Points
  - MAPP grade may become negative.



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

- Almost No Excuses Accepted
  - One or Two Excused Possible for Interviews
  - 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
  - Design Day 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**



# Meeting Attendance, Preparation & Participation (MAPP) [5 of 6]

- Excused Meeting Absences
  - Job Interviews
    - Documentation Deemed Valid
    - In Advance
  - Sickness Including COVID
    - Documentation Deemed Valid
      - ❖ Stating Not Able to Attend Due to Illness
      - ❖ By Local Medical Professional
    - Not Later Than Two Days
    - If Concerned, May Sit Masked in Back of Meeting Room
    - Read the Syllabus
  - Grief Absence
    - See MSU Policy
    - Done in Advance
  - Some MSU Events
- Cannot Accommodate Most Conflicts
- No Accommodations for Personal Reasons Other Than Above
- Will NOT Be Excused from Doing Work ← **Very Important Note**



- Requesting Excused Absences
  - Handled by Prof. Mariani and TM
    - Email Prof. Mariani and TM
    - CC Dr. D.  
(Dr. D. will not forward or respond.)
- Taking or Retaking Capstone in Fall 2025
  - Due to Dropping or Failing
  - Extremely Limited Enrollment
  - First-time eligible students will get first priority.
  - You may not be able to take capstone in the spring. ← **Note**
    - Re-enroll After Dropping
    - Re-take After Failing





# GitLab

- Every team must use MSU's GitLab.
  - Manage All Project Code
  - Instructors must have access.
- Access by External Project Sponsors
  - Can Accommodate
  - Contact Prof. Mariani
- To Receive Credit for Code, Student Must
  - Commit Code
  - Using Student's GetLab Account
- Read the syllabus.



# Team Contribution

- What % of Team Grade (70 Points) Did Student Earn
- Based on Variety of Factors Including But Not Limited to...
  - Attendance and Participation
    - Team Meetings
    - Project Sponsor Meetings
    - All-Hands/Split-Hands Meetings
  - Completion of Tasks
    - Size and Number
    - Correctly
    - On Time
  - Willingness to Take on New Tasks
  - Making Significant Technical Contribution
- Read the syllabus.



# Technical Contribution

[1 of 3]

- Required of Everyone
- Significant Work and Code
- Does Not Include Code...
  - Committed to GitLab by Someone Else
  - That Does Not Work
  - Copied from the Internet
  - Generated by ChatGPT or Any LLM or any tool.
  - Simple HTML and/or CSS
  - Not Included in The Project
  - Not Relevant to the Project
  - For CheckInCount = 1 to 100 {Modify Code Slightly; Checked Code In Again}
  - Etc...
- Necessary, but Not Sufficient
  - Doing Research
  - Creating UI/UX Designs
  - Creating Presentations and/or Documents
  - Giving Presentations
- Read the syllabus.



# Technical Contribution

[2 of 3]

- Pair Programming
  - Writing Code Together
  - Not Watching Someone Else Write Code
  - Must Decide When Committing Who Gets Credit for What
  - Receive Credit Only for Code Checked Under Your Account
- Demonstrating and Explaining Software
  - By Author
  - Any Time
  - In-Person
    - Lab iMacs
    - Personal Laptop
  - If Not Able, Assume Not Working



# Technical Contribution

[3 of 3]

- Significant Effect on Team Contribution
- Project Software == 43% Team Grade
- No Significant Technical Contribution
  - No Credit for Project Software
  - Maximum of 57% of Team Grade
  - Maximum Team Contribution of 5.7/10.0
  - Most Likely Will Not Pass CSE498
- Read the syllabus.



# Meeting and Work Expectations

- Meetings
  - In Person
  - Possibly Excused but Very Limited
  - If Miss Team Presentation, Must Give Presentation to Instructors
- Work
  - Entire Semester
  - Cannot Excuse Work Even if Meeting is Excused
- Example
  - Miss Entire Week
    - Attendance
      - ❖ Excused: -0
      - ❖ Unexcused:
        - » -3+ MAPP Points == 3+% of Final Grade
        - » -10 MAPP Points == 10% of Final Grade
    - Work
      - ❖ Attendance Excused or Unexcused
      - ❖ 1/14<sup>th</sup> Semester = 7% Semester  $\Rightarrow$  Earned Team Points  $\leq$  93% of 70 Points
      - ❖ At Least -7% of Team Contribution Grade == At Least -4.9% of Final Grade
- See syllabus.



# Using Existing Code

- Ok for Learning
  - Examples
  - Prototypes
  - Open-Source Code
    - Fragments
    - Libraries
    - Utilities
- Not Ok for Project Code
  - Copy-and-Paste
  - Not Open Source
  - ChatGPT or Any Large Language Model (LLM) ← **Note**
- Ask instructors and client in advance.
- Document and report all existing code used.
- Be Careful!



# Professionalism

- Be Professional and Respectful
  - Talking
  - Emailing
  - Texting
  - Messaging
  - Communicating in Any and All Forms
- Avoid Anything
  - Disrespectful
  - Offensive
  - Derogatory
  - Rude
  - Etc.
- All complaints must be reported even if complainant requests otherwise.





# Travel to Client

- Reimburse for Mileage for Personal Car
- Travel Within Michigan (Outside of Lansing)
  - Benton Harbor
  - Battle Creek
  - Kalamazoo
  - Grand Rapids
  - Metro Detroit
- From East Lansing to Client and Back
- Cars Per Team Per Trip
  - < 6 Team Members, 1 Car
  - = 6 Team Members, 2 Cars
- See Brenda in the CSE office in advance.



# Accommodation Letter

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- Let us know immediately.
- We will work with you.

# Integrity of Scholarship

- MSU's policies will be enforced.
- Academic dishonesty will include but not be limited to
  - committing code not written by the student to a team's main GitLab branch;
  - demonstrating code not written by the student to the instructors;
  - attempting to inflate the technical contribution by committing code not related to the project or by making multiple trivial commits or by any other means; and
  - providing false information to the professors, instructors or fellow team members about matters related to the course will be considered academic dishonesty.
- Violators...
  - ...will be reported by an Academic Dishonesty Report (ADR).
  - ...will receive a grade of 0.0 in the course.



# “Office” Hours

- Office
  - Any Time
  - Welcome to Call in Advance
- Email
- Microsoft Teams
  - Message
  - Meet
- Schedule an Appointment
  - In Person
  - Online via Microsoft Teams
- See Syllabus



# Final Grade Appeal

- Students Must Demonstrate
  - Rights Violated
  - Base on Preponderance of the Evidence
- Steps to be Completed In Order
  1. Meet with Instructors
  2. Meet with Professor Owen
  3. Request a Hearing
- Hearing Board
  - Normally Three Professors and Two Students
  - Cannot Change Grade ← **Nota Bene**
  - If Board Finds in Favor of Instructors
    - Matter Closed
    - Assigned Final Grade Stands
  - If Board Finds in Rights Violated
    - Matter Forwarded to CSE
    - Chairperson Selects CSE Professor to
      - ❖ Consider Evidence
      - ❖ Affirm Assigned Final Grade or Assign Final New Grade
- Nota Bene: Hearing Timing
  - Lengthy Process to Resolve
  - Two or More Months After Semester End
- Read the syllabus.



# Problems

- Address Immediately
  - Respectfully
  - Within Team
  - With
    - TMs
    - Prof. Mariani
    - Dr. D.



We don't have one of these.

# Capstone Overview

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✓ Course Logistics

✓ Client Projects

✓ Course Logistics (Continued)

Questions?

**We're not done yet.**



# Team Photos

[1 of 9]

- Taken by Professional Photographer
- Used
  - On Capstone Website
  - On Design Day Website
  - In Design Day Booklet
  - In The Capstone Experience Booklet
- Dress
  - Business or Business Casual
  - Team Coordinated
  - Look Professional
  - Respect Personal Cultural and/or Religious Traditions
- Cannot Be Changed ← **Note**
  - After Publications Printed
  - After Websites Published

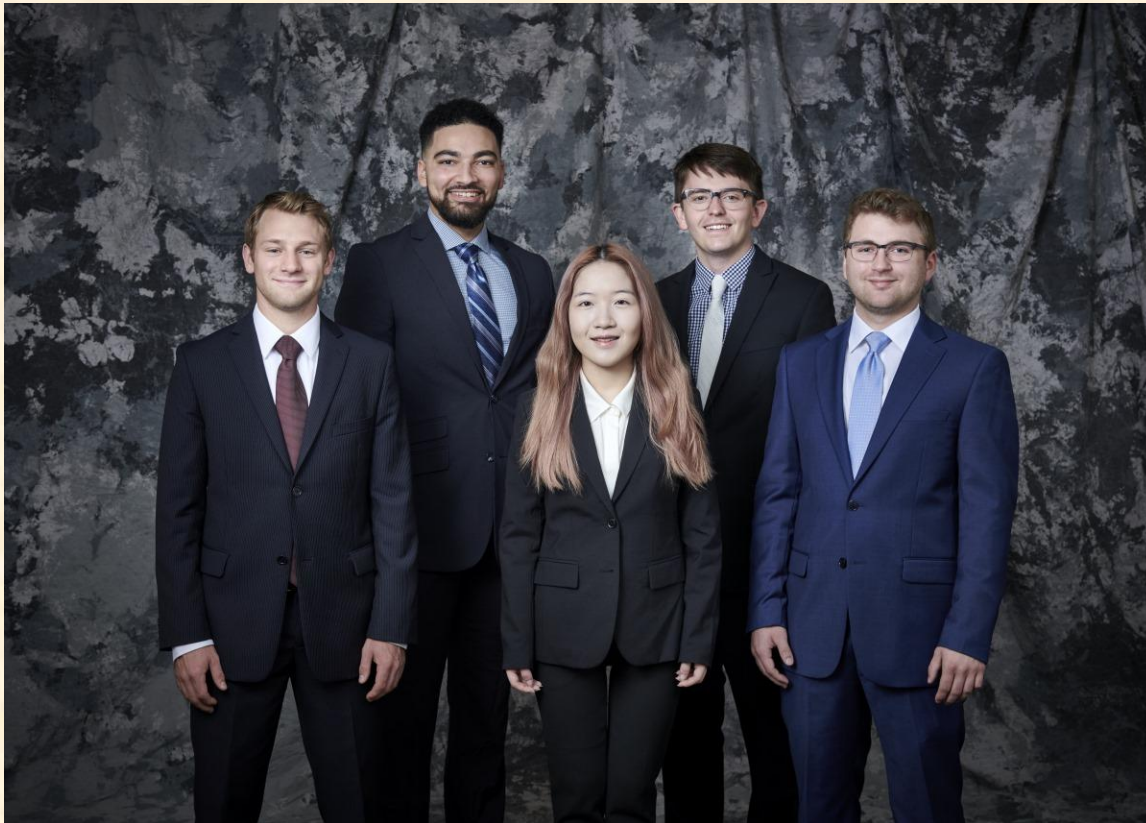




# Team Photos

[2 of 9]

- Team Amazon, Fall 2019





> Home

> News

+ Projects

+ Schedules

+ Design Day

+ Other Links

+ Archives

> Contact Us

## Team Amazon



Detroit, Michigan  
Seattle, Washington

### SPARTI: Selling Partner Application Ready to Integrate

[Watch the Video...](#)

Founded in 1994 as an online bookstore, Amazon is the largest online retailer in the world. Amazon has seen tremendous growth and success, making history by becoming the second U.S. company to be valued at \$1 trillion. A key factor in Amazon's rise to the top is their e-commerce platform, which accounted for nearly 50% of all online retail purchases last year.

Today, more than half of the items sold on Amazon are managed and listed by third-party sellers. Amazon third-party sellers utilize the Amazon Seller Central portal to manually manage their listings and inventories on Amazon's platform. While the Seller Central site works well for small businesses, manual management becomes close to impossible for large and growing businesses.

Third-party sellers often create custom selling management applications. However, the process of creating these custom applications is often too difficult or overly time-consuming.

Our SPARTI application (Selling Partner Application Ready to Integrate) enables Amazon's third-party sellers to quickly and easily create custom selling management applications.

SPARTI provides users with a template application capable of fully connecting with Amazon's seller services. To deploy their custom site, a third-party seller merely needs to update the given template code with their own information.

Turnkey integration with Amazon Web Services (AWS) is also supported within SPARTI, giving third-party sellers the ability to automatically deploy and host their applications in the cloud.

Within the course of a day, a third-party seller is able to utilize the SPARTI project to build a containerized .NET application hosted on AWS ECS Fargate. The infrastructure for the application is instantiated by AWS CloudFormation.



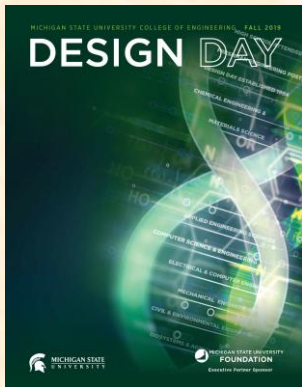
### Team Amazon

SPARTI: Selling Partner Application Ready to Integrate

[Watch the Video...](#)

MSU Team Members (Left to Right)

- Tyler Rozwadowski, Waterford, Michigan
- Jordan Mulcahy, Jackson, Michigan
- Rose Wang, Shanghai, Shanghai, China
- Matt Maple, Portage, Michigan
- Noah Girard, South Lyon, Michigan



## Amazon SPARTI: Selling Partner Application Ready to Integrate

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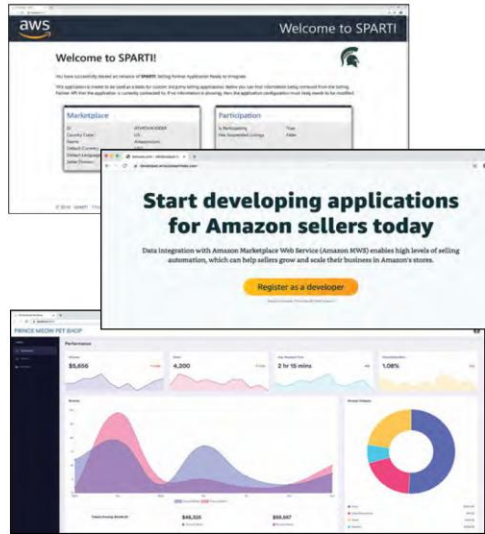
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### Michigan State University Team Members (left to right)

**Tyler Rozwadowski**  
Waterford, Michigan

**Jordan Mulcahy**  
Jackson, Michigan

**Rose Wang**  
Shanghai, Shanghai, China

**Matt Maple**  
Portage, Michigan

**Noah Girard**  
South Lyon, Michigan

### Amazon Project Sponsors

**Christin Burek**  
Seattle, Washington

**Garret Gaw**  
Detroit, Michigan

**Evan Daikoku**  
Seattle, Washington

**Sushma Gopalakrishnan**  
Detroit, Michigan

**Madhuri Marri**  
Detroit, Michigan

Team Photos  
[4 of 9]



## Amazon SPARTI: Selling Partner Application Ready to Integrate

Founded in 1994 as an online bookstore, Amazon is the largest online retailer in the world. Amazon has seen tremendous growth and success, making history by becoming the second U.S. company to be valued at \$1 trillion. A key factor in Amazon's rise to the top is their e-commerce platform, which accounted for nearly 50% of all online retail purchases last year.

Today, more than half of the items sold on Amazon are managed and listed by third-party sellers. Amazon third-party sellers utilize the Amazon Seller Central portal to manually manage their listings and inventories on Amazon's platform. While the Seller Central site works well for small businesses, manual management becomes close to impossible for large and growing businesses.

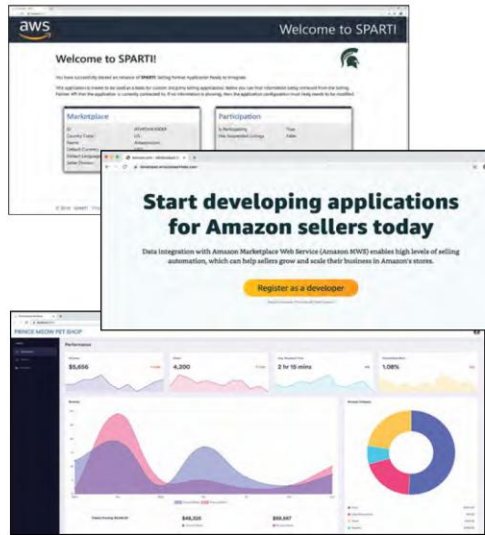
Third-party sellers often create custom selling management applications. However, the process of creating these custom applications is often too difficult or overly time-consuming.

Our SPARTI application (Selling Partner Application Ready to Integrate) enables Amazon's third-party sellers to quickly and easily create custom selling management applications.

SPARTI provides users with a template application capable of fully connecting with Amazon's seller services. To deploy their custom site, a third-party seller merely needs to update the given template code with their own information.

Turnkey integration with Amazon Web Services (AWS) is also supported within SPARTI, giving third-party sellers the ability to automatically deploy and host their applications in the cloud.

Within the course of a day, a third-party seller is able to utilize the SPARTI project to build a containerized .NET application hosted on AWS ECS Fargate. The infrastructure for the application is instantiated by AWS CloudFormation.



### Michigan State University Team Members (left to right)

**Tyler Rozwadowski**  
Waterford, Michigan

**Jordan Mulcahy**  
Jackson, Michigan

**Rose Wang**  
Shanghai, Shanghai, China

**Matt Maple**  
Portage, Michigan

**Noah Girard**  
South Lyon, Michigan

### Amazon Project Sponsors

**Christin Burek**  
Seattle, Washington

**Garret Gaw**  
Detroit, Michigan

**Evan Daikoku**  
Seattle, Washington

**Sushma Gopalakrishnan**  
Detroit, Michigan

**Madhuri Marri**  
Detroit, Michigan

Team Photos  
[5 of 9]

# Team Photos

[6 of 9]

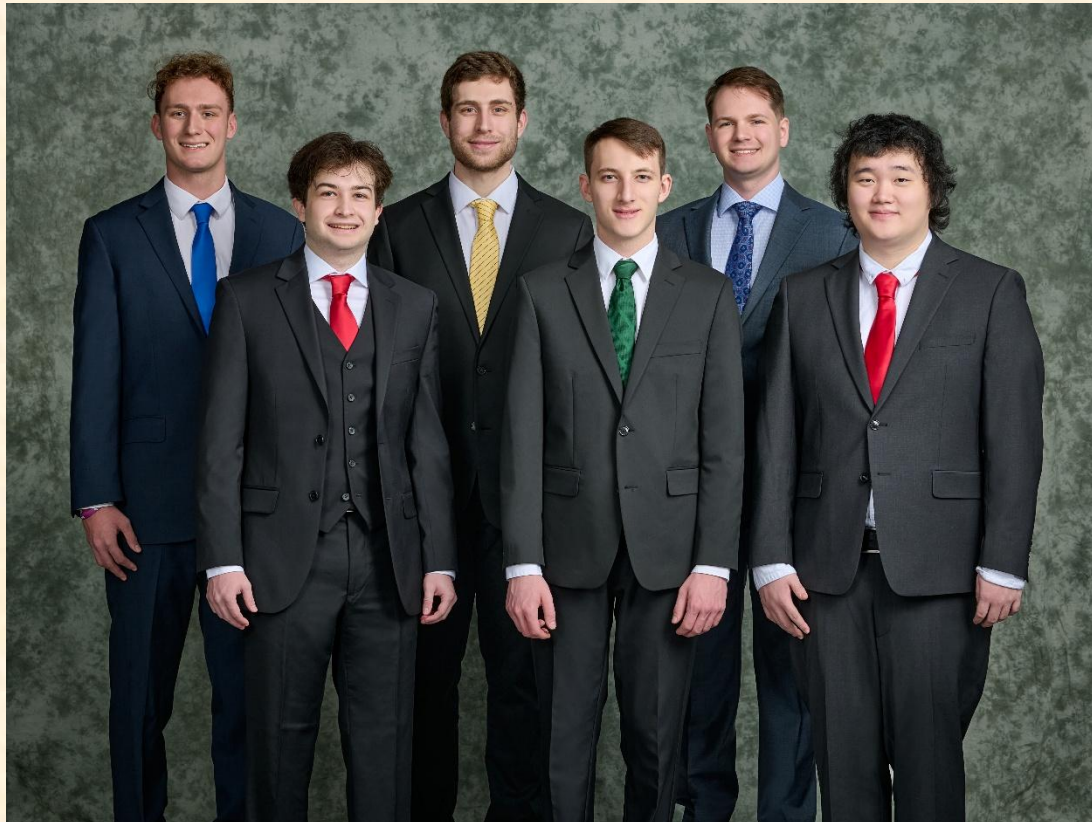
- Team Amazon, Spring 2024



# Team Photos

[7 of 9]

- Team Google, Spring 2024



# Team Photos

[7 of 9]

- Team HAP, Fall 2024



# Team Photos

[9 of 9]

- Coordinated by Prof. Mariani
- Friday, January 24, 9:00 a.m. – 5:00 p.m.
  - On-Time Attendance Required by All Team Members
  - Put on your calendar now. ← **Note**
  - Do not plan travel. ← **Note**
  - Outside of Engineering 3105 (CSE Conference Room)
  - Missing == Up to -5.0 MAPP Points
- Dress
  - Business Preferred
  - At Least Business Casual
  - Team Coordinated
- Photo Availabilities Due by Tomorrow Night





# What's ahead?

[1 of 4]

- Upcoming Meetings

- 01/21, Tu: Risks and Prototypes
- 01/23, Th: Project Plan
- 01/24, Fr: Team Photos (8:00 a.m. – 5:00 p.m.)
- 01/28, Tu: Team Status Report Presentations
- 01/30, Th: Schedule and Teamwork
- 02/04, Tu: Team Project Plan Presentations
- 02/06, Th: Design Day Booklet Process
- 02/11, Th: Team Project Plan Presentations

10% of  
Team Grade



# What's ahead?

[2 of 4]

- Split-Hands Meetings
  - Used On Presentation Days
    - 01/28: Team Status Report Presentations
    - 02/04,11: Team Project Plan Presentations
  - Three Locations
    - Luke: 158 Natural Resources
    - Griffin: B115 Wells Hall
    - Sam: 1279 Anthony Hall
  - Find the rooms in advance.
  - Attendance Taken As Usual Including Lateness



# What's ahead?

[3 of 4]

- Website, Email and Team's Messages
  - Check Constantly
  - Read Carefully
  - Not Seeing and/or Reading Email ≠ Valid Excuse
- Triage Meetings
  - Scheduled
  - Attendance & Preparation
- 02/04, 02/11: Team Project Plan Presentations
  - Slide Deck Posted Online
  - Read and Review
  - Discuss in Triage Meetings



# What's ahead?

[4 of 4]

- 01/28: Team Status Report Presentations
  - Less 2 Weeks From Today ←**Note**
  - Split-Hands Meeting
  - Slide Deck Template Posted on Downloads Page
    - 4 Slides
    - Presentation 6 Minutes Max
  - Must Use Windows Version of Office 365 ←**Note**
  - Read Submission Instructions Carefully
  - Due by 11:59 p.m. ET, Monday, 01/27
  - Upload Two Times to Microsoft Teams
    - To General Channel File Space  
Folder “Team Status Report Presentation Slide Decks”
    - To Capstone Team’s Private Channel
  - Aggregated Slide Decks by TM
    - On TM’s Laptop Used by All Teams
    - One or More Presenters Per Team
    - Random Order



# Aside: Filenames

- Convention
  - Use all lowercase.
  - Delete non-numeric and non-alphabetic characters except dashes.
  - Replace blanks by dashes.
- Examples
  - Team Amazon  
team-amazon-status-report-presentation.pptx
  - Team Auto-Owners  
team-auto-owners-status-report-presentation.pptx
  - Team Delta Dental dSLATE  
team-delta-dental-dslate-status-report-presentation.pptx



# Read Me

[1 of 2]

- Presenting

- The Status Report Presentations will be given on Tuesday, January 28.
- The purpose of your Status Report Presentation is for your team to demonstrate that you have made significant progress on your project. In particular, you will give status reports on a variety of things including the status of project sponsor contact, project sponsor meeting schedules, team meeting schedules, team organization, server systems and software, development systems and software, a brief description of the project, the status of your project plan and the initial identification of risks.
- The time limit for your presentation is 6 minutes, which will be strictly enforced. Practice your presentation to ensure that your team will finish within the allotted time of 6 minutes.
- Be ready to answer questions, including tough questions.
- We will meet in “split-hands” meetings. Luke’s teams will meet in 158 Natural Resources, Griffin’s teams will meet in B115 Wells Hall, and Sam’s teams will meet in 1279 Anthony Hall.
- Dr. D. will combine the individual team slide decks into multiple slide decks, one for each TM.
- Your TM will project the combined slide decks using their laptop, which your team will use for your presentation.
- Your team may have one or more presenters.
- The order in which the teams will present will be random.



# READ ME

[2 of 2]

- **Creating and Editing**

- Read and follow the instructions in “Editing Documents and Presentations Using Office 365” of our [course syllabus](#).
- You must use this PowerPoint slide deck template as is. Do not change the number of slides unless the instructions explicitly allow you to duplicate slides. Do not change the order of the slides. Do not change the styles. Do not edit the master slides.
- Throughout the template, replace placeholders [...] with the appropriate information.
- Edit the center footer by clicking the Header & Footer button on the Insert ribbon. Change [Team Name] in the footer to your company name as in “Team TechSmith Status Report Presentation”. If necessary, extend the width of the center footer textbox on the master slide, making sure that you re-center the enlarged textbox.
- Do not include any company confidential information in your presentation.
- Delete every textbox that includes “Delete this textbox” and every slide that includes “Delete this slide.”

- **Submitting**

- All presentations must be submitted to us and to your client by 11:59 p.m., Monday, January 27.
- Name your PowerPoint slide deck file as “team-[team-name]-status-report-presentation.pptx” replacing “[team-name]” with your team’s name normalized by using all lower case, deleting non-numeric and non-alphabetic characters, and replacing blanks by dashes. Examples include “team-kohls-status-report-presentation.pptx” and “team-wk-kellogg-co-status-report-presentation.pptx”. Set File Explorer or Finder to show all file extensions to ensure that there are no blanks before the “.pptx” extension as in “team-amazon .pptx”.
- Upload your PowerPoint slide deck to the folder “Status Report Presentation Slide Decks” in our Microsoft Teams General Channel file space by 11:59 p.m., Monday, January 27. In addition, upload your slide deck to your team’s private channel file space in case your slide deck is deleted by accident from the General Channel file space. Set File Explorer or Finder to show all file extensions to ensure that there are no blanks before the “.pptx” extension as in “team-amazon .pptx”.
- Email a copy of your slide deck to your client as well by 11:59 p.m., Monday, January 27. Do not cc us on that email. Include some professional text in the body of your email to practice being a professional and to avoid having your email sent to your project sponsor’s junk folder.



# Status Report Presentation

[Project Title 36pt]

The Capstone Experience

Team [Team Name 24pt]

[Team Member 1 16pt]

[Team Member 2 16pt]

[Team Member 3 16pt]

[Team Member 4 16pt]

[Team Member 5 16pt]

[Team Member 6 16pt]

**Status** Information:

Think clicking "**Status**" on an Amazon order.

- You bought this on Monday, January 13. Helpful?
- We're going to send this to you. Satisfied?
- People who bought this also bought.... We good?

Where the \$\*(%(\$\* is my order?

**Delete this textbox.**





# Team [Team Name]


## Status Report

[1 of 4]

### [Project Title]

- Sponsor Overview

- Overview Point 1
- Overview Point 2
- Overview Point 3




Describe your sponsor in 30 seconds or less.

**Delete this textbox and the brace to the left.**

- Project Overview

- Description Point 1
- Description Point 2
- Description Point 3
- Description Point 4



Describe your project in 30 seconds or less.

What problem does it solve?

Who will use it? How will they use it?

**Delete this textbox and the brace to the left.**



# Team [Team Name]

## Status Report

[2 of 4]

### [Project Title]

- Server Systems / Software
  - Description &/or Status Point 1
  - Description &/or Status Point 2
  - Description &/or Status Point 3
- Development Systems / Software
  - Description &/or Status Point 1
  - Description &/or Status Point 2
  - Description &/or Status Point 3
- Project Plan Document
  - Status Point 1
  - Status Point 2
  - % Complete

Include status information.

Are all systems up and running?

Have you tested everything?

**Delete this textbox and the brace to the left.**

Include status information.

What's the status of your project plan document?

Have you started it?

How much have you written?

What percentage complete is it?

**Delete this textbox and the brace to the left.**



# Team [Team Name]

## Status Report

[3 of 4]

### [Project Title]

- Client Contact

- Status Point 1
- Status Point 2

- Team Meetings

- Status Point 1
- Status Point 2

- Team Organization

- Description Point 1
- Description Point 2

Include status information.

Have you talked with/met with your client?

Have you scheduled a weekly conference call? When?

Have you scheduled an in-person meeting? When?

How many times has your team met so far?

Have you scheduled team meetings? How often?

**Delete this textbox and the brace to the left.**

Include status information.

Who's doing what?

**Delete this textbox and the brace to the left.**



# Team [Team Name]

## Status Report

[4 of 4]

### [Project Title]

#### Risks

- Risk 1
  - Description
  - Mitigation
- Risk 2
  - Description
  - Mitigation
- Risk 3
  - Description
  - Mitigation
- Risk 4
  - Description
  - Mitigation

A “Risk” is a significant task that you need to accomplish that you currently do not know how to do. Usually, a risk is a “showstopper,” meaning if you cannot complete the task, you cannot complete your project.

“Mitigation” for a particular risk is your plan for eliminating that risk; that is, your plan for figuring out how to accomplish the task.

List only “real” risks. For example, learning new computer languages is **not** a risk for an MSU CSE student.

Give “useful” explanations of how you are going to mitigate each risk. For example, “we will learn how to do it” is **not** a useful explanation.

**Delete this textbox.**

