MICHIGAN STATE UNIVERSITY

10/07: Design Day Booklet Production Process

The Capstone Experience

Dr. Wayne Dyksen James Mariani Luke Sperling

Department of Computer Science and Engineering Michigan State University

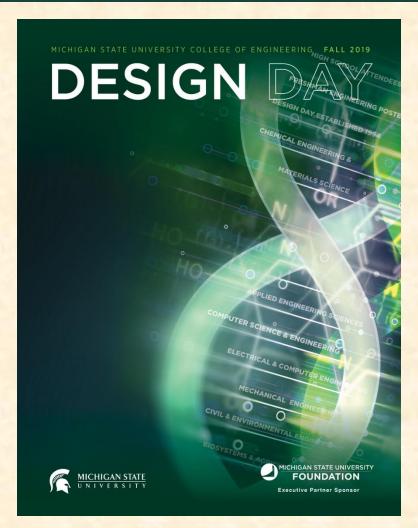
Fall 2020

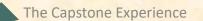


From Students... ...to Professionals

Design Day Booklet

- Professional Publication
 - Corporate Relations
 - Alumni Relations
 - Recruiting
 - Keepsake for You
- Contents
 - Schedule of Events
 - Project Descriptions





Team Project Page

- Template Distributed by Dr. D.
 - Sponsor Name
 - Sponsor Logo
 - Project Title
 - MSU Team Photo
 - MSU Team Members' Names
 - Corporate Sponsors' Names
 - Headers and Footers
 - Posted On <u>Downloads</u> Page
- Template Completed by Team
 - Project Description
 - Artwork
 - Use Microsoft Windows Office 365 Version of Word.

Team's Job

- Read instructions <u>carefully</u>.
- Check everything.
- Use Microsoft Windows Office 365 version of Word.
- Write the project description.
- Read the instructions <u>carefully</u>.
- Provide the artwork.
- Read the instructions <u>carefully</u>.
- Update the project description and artwork.
- Read the instructions <u>carefully</u>.
- Check everything 100 times.
- Read the instructions <u>carefully</u>.

Project Description

- Read the instructions carefully.
- Newspaper / Magazine Style
- Target General Public
- Do NOT Start...
 - "Our Project is..."
 - "Our sponsor asked us to..."
- Use present tense throughout.
- Write as though your project is complete.
- Fill the entire textbox, no less, no more.
- See Examples
 - The Capstone Experience Booklet
 - Previous Design Day Booklets (Design Day > Booklet)
 - MSU Men's Basketball

Project Description

- Beginning
 - Sponsor Overview
 - 2 to 3 Lines
 - See Previous Examples
- Middle
 - The Problem & Your Solution
 - Magazine Style
 - Understandable by Non-Technical Person
- End
 - Technical Jargon
 - 2 to 3 Lines
 - See Previous Examples

[2 of 2]

Example Project Description: Spartan Basketball Player Timer

Michigan State University's Men's Basketball is elite, one of the top programs in the NCAA.

NCAA Division I basketball is very competitive. Although it may not be apparent to the casual observer, every detail of each game is carefully planned and scripted.

One aspect of a game plan is that of playing times. For each player, the coaches determine target times for how long he can play at a stretch, how long he needs to rest before playing again, and the total amount of time he should play in a game.

Developed with Coach Tom Izzo, our Spartan Basketball Player Timer is used by the basketball staff on the bench during the game.

When a player enters the game, his playing time is displayed with a solid green background. When his target playing time goes under two minutes, it is displayed in yellow. When the time goes below zero, it is displayed in red.

The color coding of times provides visual cues that can be seen by the coaches at a distance. If there are many yellow or red boxes, the coaches begin to plan substitutions.

A game summary for all the players can be displayed at any time whether the game clock is running or stopped.

Our software runs on a Microsoft Windows Tablet PC about the size of a traditional clipboard only slightly thicker. With no mouse or keyboard, all input is done with a pen.

Spartan Basketball Player Time is written in Visual Basic. The underlying database is Microsoft Access.



Artwork

- Read the instructions <u>carefully</u>.
- Take 2 to 3 screenshot(s) of working software.
 - Use eye-catching examples.
 - Avoid boring or trivial things.
 - Splash Screens
 - Login Screens
- Fill up the <u>entire</u> whitespace.
- Overlap artwork if necessary.
- Include "framing" for web and mobile apps.
 - Browser
 - iPhone, iPad
 - Android Phone or Tablet
 - NOT Laptop or Desktop
 - See <u>https://mockuphone.com</u>.

Artwork

[2 of 2]

- Read the instructions <u>carefully</u>.
- Add borders if necessary.
 - If Blends Into White Background
 - Create a single PNG for each piece of artwork using PowerPoint.
 - Read Instructions
- Capture and provide very high-resolution images.
- Preserve aspect ratios.
- Crop to eliminate transparent "borders."
- Eliminate all surrounding "whitespace."
- Use paint.net.
- See examples.
 - The Capstone Experience Booklets
 - Design Day Artwork Feedback, Spring 2020
 - Previous Design Day Booklets (<u>Design Day > Booklet</u>)
 - MSU Men's Basketball

[1 of 5]

CSE 498 / 7:30 a.m. Engineering Building, Room 3405 | Third Floor

Amazon AVAST: Amazon Video And Shopping Technology

-2

ounded in 1994 as an online bookstore, Amazon is the largest online retailer in the world. In addition to retail, Amazon offers services in cloud infrastructure through Amazon Web Services, and audio and video streaming through Amazon Music and Prime Video.

According to a recent study, 80% of internet usage will be people watching online videos by the year 2020. This presents a significant opportunity for all online retailers. Our AVAST (Amazon Video And Shopping Technology)

platform leverages the growth in online video streaming by providing users with an easy way to purchase products of interest that they see in the videos they are watching.

Using AVAST, an Amazon customer can stream videos from content providers such as YouTube and their favorite TV networks

While a user is watching a video, AVAST analyzes it to find items of potential interest to the viewer. As the video plays, related Amazon products are displayed alongside the video as illustrated in the examples at the right.

For each item, AVAST displays a product description, pictures and ratings. A viewer can easily purchase any product simply by clicking on the conveniently provided link to Amazon

The frontend of AVAST (Amazon Video And Shopping Technology) is built using Angular 6, while the backend is implemented using PHP Laravel. In addition, several Amazon Web Services are used including Rekognition to analyze videos, and EC2 to host the AVAST website.



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Michigan State University Team Members (left to right)	Amazon Project S
Linshawn Fang	Garret Ga
Wenzhou, Zhejiang, China	Detroit, M
Ben Nwachukwu	Derek Ge
Oak Park, Michigan	Detroit, M
Patrick McCormick Northville, Michigan	Kyle Kos Detroit, M
lan McGregor Clarkston, Michigan	Pete Pfei

Han Wang Novi Michigan



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Engineering Building, Room 3405 | Third Floor 7:43 a.m. / CSE 498

Aptiv **Autonomous Vehicle Fleet Connectivity App**

ptiv is a global technology company that is transforming mobility with its portfolio of safe, Agreen, and connected solutions for its customers. As a leader in autonomous vehicle development, Aptiv maintains an extensive test fleet of autonomous vehicles,

which must be managed and monitored. Our Autonomous Vehicle Fleet Connectivity App provides connectivity to Aptiv's autonomous test fleet, which operates across the US, Europe and Asia, and includes various vehicles with software for every level of autonomy.

Among other features, our system provides scheduling of test vehicles. After logging in, Aptiv engineers see a calendar view of the entire fleet from which they can select a particular day to obtain a list of available vehicles.

Once a vehicle is selected, our app displays a complete set of information about it including its past usage, reservations and diagnostic information.

In addition to checking availability of vehicles based on dates, our app provides for advanced search to narrow the scope based on things like type of vehicle, location of vehicle and level of autonomy.

The "My Reservations" tab shows a user's upcoming vehicle reservations as well as enabling them to make and cancel reservations.

Our Autonomous Vehicle Fleet Connectivity App is written using the Angular web framework, obtaining information from Aptiv's native servers. Communications are implemented using Microsoft Azure Services.



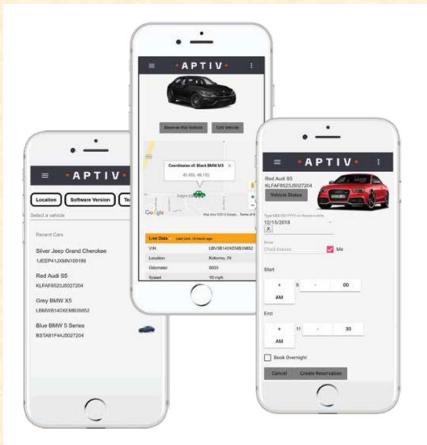
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Michigan State Unive Team Members (left to rid Alex Patton Howell, Michigan Drew Glapa xter, Michigan Emilio Castillo Lansing, Michigan Klint Kaercher Lansing, Michigan Chad Krause lovi, Michiga

ersity ht)	Aptiv Project Sponsors	
	Chris Lussenhop Troy, Michigan	
	Joe Lyon Troy, Michigan	
	Ross Maguire Troy, Michigan	
	Jim Quesenberry Troy, Michigan	

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The Capstone Experience

Design Day Booklet Production Process

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CSE 498 / 7:56 a.m. Engineering Building, Room 3405 | Third Floor

Auto-Owners Insurance Jeffrey: Virtual Insurance Claim Advisor

uto-Owners Insurance is a Fortune 500 company that provides automotive, home, life and commercial A insurance. Headquartered in Lansing, Michigan, Auto-Owners is represented by over 44,000 licensed insurance agents across 26 states, and provides insurance to nearly 3 million policyholders.

Every day, hundreds of insurance claims are filed with Auto-Owners through its independent agents. This process can be tedious for both policyholders and agents.

Our Jeffrey Virtual Insurance Claim Advisor system is a virtual claim assistant that automates the entire claim reporting process. Our mobile app, shown at the right, enables both agents and policyholders to file a claim easily and efficiently.

Jeffrey engages in a dialogue with policyholders and agents to gather information required to file their claim through natural conversation. If necessary, Jeffrey prompts users to take photos, record videos or attach documents relevant to a claim. After completing a dialogue with a user, Jeffrey

automatically gathers the appropriate claim information and submits it to Auto-Owners.

Our companion web app enables agents and Auto-Owners associates to find and review claim information that is submitted through the mobile application.

Our Jeffrey Virtual Insurance Claim Advisor system features natural language processing, which is implemented using Google's Dialogflow. A custom REST API, written in Kotlin, handles interactions between the applications and our MySQL database. Our web application is built using the React JavaScript framework

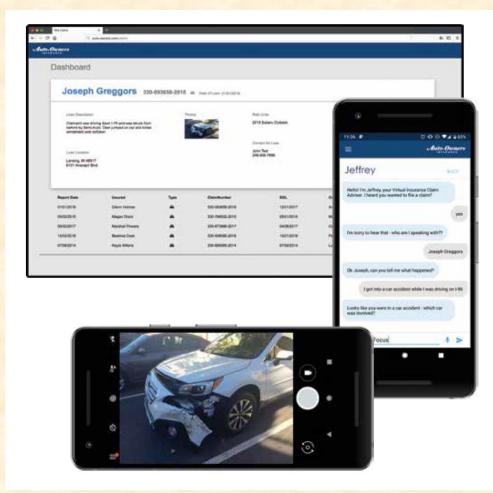






Auto-Owners **Project Sponsors Ross Hacker** Lansing, Michigan Scott Lake Lansing, Michigan Jim Schumacher

Lansing, Michigan



[4 of 5]

Engineering Building, Room 3405 | Third Floor 9:53 a.m. / CSE 498

Proofpoint Improved Detonation of Evasive Malware

eadquartered in Sunnyvale, California, Proofpoint provides cybersecurity to many organizations, including Fortune 100 companies and educational institutions such as Michigan State University.

Analyzing malware is challenging. Viruses, spyware, ransomware and other malicious programs come in many complex forms. To protect its customers, Proofpoint uses tools called sandboxes, which are restricted computing environments where potentially harmful malware can be tested and analyzed safely. Unfortunately, a new class of malware called "evasive

malware" is rapidly emerging, thereby presenting a new, more dangerous class of cybersecurity threats.

Evasive malware has the ability to detect the presence of the sandbox environment. After doing so, it changes what it does, thereby evading analysis.

Our Improved Detonation of Evasive Malware system modifies evasive malware to block its ability to detect the sandbox environment, which causes it to execute. When the evasive malware does execute, its behavior is analyzed to determine precisely what it does so that Proofpoint can design countermeasures to protect against it.

Our web app, shown at the right, displays the results of processed malware. Users can check the status of the malware samples being tested as well as see the top evasive techniques being used. Both harmless and harmful evasive results are presented.

Our Improved Detonation of Evasive Malware system is implemented in Python, using the Cuckoo sandboxing framework and Suricata network monitor. Our web app is implemented using Python and Flask with the interface framed in Bootstrap and jOuery



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proofpoint.

Des a fer a last Michigan State Univer Team Members (left to righ Jack Mansueti Beverly Hills, Michigan Canton, Michigan

Sean Joseph Grand Ledge, Michigan

Rvan Gallant Midland, Michigan

lan Murray Midland, Michigan

Tae Park

t)	Project Sponsors
	Leilani Alejo Sunnyvale, California
	Kristi Gee Sunnyvale, California

Brad Woodberg Troy, Michigan

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The Capstone Experience

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The Capstone Experience

MSU Federal Credit Union Banking with Amazon's Alexa and Apple's Siri

ounded in 1937, Michigan State University Federal - Credit Union offers financial services to Michigan State University and Oakland University faculty, staff, students, alumni association members and their families. With 230,000 members and over \$3,3 billion in assets. MSUFCU is the largest university-based credit union in the world.

MSUFCU currently offers mobile banking apps on both Apple (iOS) and Google Android devices for members to access their funds and perform banking transactions at any time.

Our Banking with Amazon's Alexa and Apple's Siri systems maintain MSUFCU's technological edge by expanding their banking offerings to voice-controlled smart devices such as Amazon Alexa-enabled devices, Apple Watch and Android Wear.

Voice-controlled technologies give MSUFCU members new ways to interact with their accounts, including accessing their account balance, transferring money and obtaining information about recent transactions. Members can request other information about MSUFCU such as branch hours, current loan rates and the location of the nearest ATM or Branch.

Our companion administrative web portal enables MSUFCU staff to manage the available information and services offered by these voice technologies. Frequently asked questions can be added to the apps in minutes to improve the user experience.

The Alexa skill is written in Python, Apple Watch in Swift and Android Wear in Java. All three contact a MySQL database through JSON. The administrative web portal is written in PHP.







Michigan State University Team Members (left to right) Steven Jorgensen Saranac, Michigan Kieran Hall Traverse City, Michigan Will Rudnick Chicago, Illinois Ethan Boyd Saline, Michigan

Giuning Ren Beijing, China



MSUFCU

Project Sponsors



Andy Wardell East Lansing, Michigan



Building Dreams Together

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Example Spartan **Basketball Player** Timer

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

Michigan State University Men's Basketball Spartan Basketball Player Timer

NCAA Division I basketball is very competitive. Although it may not be apparent to the casual observer, every

Although it may not be apparent to the casual observer, every detail of each game is carefully planned and scripted One aspect of a game plan is that of playing times. For each player, the coaches determine target times for how long he can play at a stretch, how long he needs to rest before playing again, and the total amount of time he should play in a game. Developed with Coach Tom Izzo, our Spartan Basketball Player Timer is used by the basketball staff

on the bench during the game.

When a player enters the game, his playing time is displayed with a solid green background. When his target playing time goes under two minutes, it is displayed in yellow. When the time goes below zero, it is displayed in red.

The color coding provides visual cues that can be seen by coaches at a distance. If there are many yellow or red boxes, coaches begin to plan substitutions. A game summary for all the players can be displayed at any time whether the game clock is

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Spartan Basketball Player Timer is written in Visual Basic. The underlying database is Microsoft Access.

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Team Members Nayne Dyksen orth Haledon, New Jersey Nayne Dyksen Frand Rapids, Michigan Nayne Dyksen /est Lafayette, Indiana

Nayne Dyksen ast Lansing, Michigan Mark Montgomery East Lansing, Michigan Dwayne Stephens East Lansing, Michigan

Project Sponsors **Richard Bader**

East Lansing, Michigan Jim Boylen

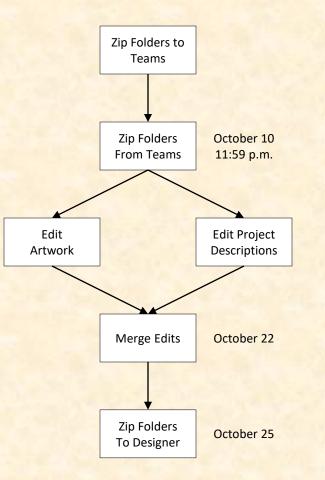
East Lansing, Michigan

East Lansing, Michigan

Tom Izzo

PAGE N + 0

The DD Booklet Production Process



1 Template From Dr. D. To Team

Engineering Building, 1300 Hallway | First Floor

United Airlines Training Scheduling and Optimization System II

Insert your project description here. Read the <u>Design Day</u> <u>Booklet Page Instructions</u> thoroughly, over and over and over and over and over.

For examples, see previous Design Day booklets, which you can find <u>here</u>.

You must use the Microsoft Windows version of Word. Do NOT even think about using anything else.,

The first two or three lines must be about your client. The following is an example.

Auto-Owners Însurance is a Fortune 500 company that provides automotive, home, life and commercial insurance to nearly 3 million policyholders in 26 states.

Do NOT use phrases like "Our clients asked us to,..." or "Our project is ..."

Do NOT uses phrases like "Our software aims to..." or "Our software is designed to..."

Write everything in the present tense.

Do NOT write anything negative about your client like "Our client's current software is horrible; ours is better."

Read the <u>Design Day Booklet Page Instructions</u> thoroughly, over and over and over and over.

It's okay for a paragraph to have only one sentence as long as the sentence is long enough to take up at least 1.5 lines.

The last few lines (and only the last few lines) must contain technical details about your project. The following is an example.

Read the <u>Design Day Booklet Page Instructions</u> thoroughly, over and over and over and over and over.

The frontend of AVAST (Amazon Video And Shopping Technology) is built using Angular 6, while the backend is implemented using PHP Laravel. In addition, several Amazon Web Services are used including Rekognition to analyze videos.

- To insert your artwork, right-click on this artwork (grey rectangle with text within the textbox) and select "Change Picture..."
- Put each piece of artwork in a separate artwork textbox.
 Do not change the textbox's red external borders. Use them as handles to move and resize the textbox. The red borders will be made invisible later.
- Delete the artwork textboxes that you do not need.
- If you need more textboxes, you must copy-and-paste one of these existing artwork textboxes. Right-click on the outside red external border, select copy, and then paste.
- To layer overlapping textboxes, right-click on a textbox red border, and select "Bring to Front" or "Send to Back."

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Michigan State University Team Members (left to right) Josh Pezeshki Franklin, Michigan Jack Soenke Naperville, Illinois

Laura Danila Livonia, Michigan Andrew Ferguson Livonia, Michigan

United Airlines Training

Project Sponsors Amadou Anne Chicago, Illinois Craig Bennett Chicago, Illinois Rick Brown Chicago, Illinois Lynda McDaniel

Lynda McDaniel Houston, Texas Tom Wilson Chicago, Illinois

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2 Project **Description Draft From Team** To Dr. D.

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

United Airlines Training Scheduling and Optimization System II

United Airlines is the world's second largest airline company, operating 4,600 flights a day to 357 destinations. To maintain its fleet of 1,300 aircraft and ensure successful flights, it is crucial to have properly trained personnel. United's Technical Operations division has 60 instructors, who teach around 700 classes yearly to over 7,000 employees.

Our Training Scheduling and Optimization System II provides a web app to facilitate United's maintenance training schedulers to schedule instructors and students for courses across the country.

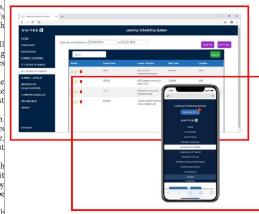
When the scheduler goes to schedule a course, the system displays available locations and instructors. The scheduler can also schedule a course from a training request inputted by instructors or supervisors.

Our system contains a schedule optimization system. Within a given time frame, a scheduler inputs a set of classes and locations. The optimizer recommends an optimal schedule, including instructor and classroom. This reduces the amount of time the scheduler needs to plan courses.

The scheduler will be able to view calendars with published, planned, and optimized courses. They can edit classes from this view. The calendars can be sorted by instructor, location, and class. If a conflict is attempted to be scheduled, a notification will alert the scheduler.

The web app is fully functional using both web browsers and mobile browsers.

Our Training Scheduling and Optimization System II web app is built with ASP.NET Core, Angular 8, Node.js, an Entity Framework, and an Azure SQL database. The web app is hosted as an app service on Azure Cloud Platform.







Michigan State University Team Members (left to right) Josh Pezeshki ranklin. Michigar Jack Soenke aperville, Illinois Laura Danila vonia, Michigan Andrew Ferguson ivonia, Michigan

United Airlines Project Sponsors Amadou Anne Chicago, Illinois

Craig Bennett Chicago, Illinois **Rick Brown** hicago, Illinois Lynda McDaniel Houston, Texas Tom Wilson

Chicago, Illinois

PAGE N + 24

2 Project Description Draft From Team To Dr. D.

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

United Airlines Training Scheduling and Optimization System II

United Airlines is the world's second largest airline company, operating 4,600 flights a day to 357 destinations. To maintain its fleet of 1,300 aircraft and ensure successful flights, it is crucial to have properly trained personnel. United's Technical Operations division has 60 instructors, who teach around 700 classes yearly to over 7,000 employees.

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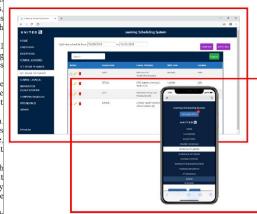
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Michigan State University Team Members (left to right) Josh Pezsehk Franklin, Michigan Jack Soenke Naparnile, Illinois Laura Danila Lixona, Michigan Andreer Ferguson Lixonia, Michigan United Airlines Project Sponsors Amadou Anne Chicago, Illinois Craig Bennett Chicago, Illinois Rick Brown Chicago, Illinois Lynda McDaniel Houston, Texas

Tom Wilson

Chicago, Illinois

The Capstone Experience

3 Project Description Edits By TAs

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

United Airlines Training Scheduling and Optimization System II

United Airlines is the world's second largest airline company, operating 4,600 flights a day to 357 destinations. To maintain its fleet of1,300 aircraft and ensure successful flights, it is crucial to have properly trained personnel. United's Technical Operations division has 60 instructors, who teach around 700 classes yearly to over 7,000 employees.

Our Training Scheduling and Optimization System II provides a web app to facilitate United's maintenance training schedulers to schedule instructors, students, and courses across the country.

When the scheduler wants to schedule a course, they must take into account a number of factors, including instructor availability, venue availability, instructor travel distance, and instructor qualifications.

Using our web and iOS apps, users can schedule classes manually, or through our automated schedule optimizer. Manual scheduling can be used effectively for a few classes in a short time frame. However, when dealing with a large number of classes taking into account all relevant factors, manual scheduling is an arduous task.

Our schedule optimization feature allows a scheduler to input a given time frame, a set of classes, and a set of locations. The optimizer then recommends an optimal schedule, including instructor and classroom assignments.

The optimized schedule minimizes the distance traveled by instructors, and takes into account instructor preferences and room availabilities.

An optimized schedule saves United Airlines significant time, money, and resources.

Óur Training Scheduling and Optimization System II web app is built with ASP.NET Core, Angular 8, Node is, an Entity Framework, and an Azure SQL database. The web app is hosted as an app service on Azure Cloud Platform.

- Round 1 edits by James and Ryan ...
 - Our Training Scheduling and Optimization System II provides a web app to facilitate United's maintenance training schedulers to schedule instructors and students for courses across the country.
 - When the scheduler goes to schedule a course, the system displays available locations and instructors. The scheduler can also schedule a course from a training request inputted by instructors or supervisors.
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 - The web app is fully functional using both web browsers and mobile browsers.
 - Our Training Scheduling and Optimization System II web app is built with ASP.NET Core, Angular 8, Node 5, an Entity Framework, and an Azure SQL database. The webapp is hosted as an app service on Azure Cloud Platform.



Michigan State University Unit Team Members (left to right) Proj Josh Pezeshki Frankim, Mchigan Chere Napervile, Illinois Rick Laura Danila Chier Lorina, Michigan

Andrew Ferguson

United Airlines Project Sponsors

Amadou Anne Chicago, Illinois Craig Bennett Chicago, Illinois Rick Brown Chicago, Illinois

Lynda McDaniel Houston, Texas Tom Wilson Chicago, Illinois

PAGE N + 24



3 Project Description Edits By Jill

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

United Airlines Training Scheduling and Optimization System II

United Airlines is the world's second largest airline company, operating 4,600 flights a day to 357 destinations. To maintain its fleet of1,300 aircraft and ensure successful flights, it is crucial to have properly trained personnel. United's Technical Operations division has 60 instructors, who teach around 700 classes yearly to over 7,000 employees.

Our Training Scheduling and Optimization System II provides a web app to facilitate United's maintenance training schedulers to schedule instructors, students, and courses across the country.

When the scheduler wants to schedule a course, they must take into account a number of factors, including instructor availability, venue availability, instructor travel distance, and instructor qualifications.

Using our web and iOS apps, users can schedule classes manually, or through our automated schedule optimizer. Manual scheduling can be used effectively for a few classes in a short time frame. However, when dealing with a large number of classes, taking into account all relevant factors, manual scheduling is an arduous task.

Our schedule optimization feature allows a scheduler to input a given time frame, a set of classes, and a set of locations. The optimizer then recommends an optimal schedule, including instructor and classroom assignments.

The optimized schedule minimizes the distance traveled by instructors, and takes into account instructor preferences and room availabilities.

An optimized schedule saves United Airlines significant time money, and resources.

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PAGE N + 24



- instructors (remove coma)
- including (I would remove the colon)
- timeframe
- classes, (would remove the comma and insert "and")

timeframe

Michigan State University United Airlines Team Members (left to right) Project Sponsors

) earn Members (left to ng Josh Pazeshki Frankin, Michigan Jack Soenke Naperville, Ilinois Laura Danila Livonia, Michigan

ivonia. Michigan

Andrew Ferguson

Houston, Texas Tom Wilson Chicago, Illinois

Amadou Anne Chicago, Illinois

Craig Bennett

Chicago, Illinois

nicago, Illinois

Lynda McDaniel

Rick Brown

3 Artwork Draft From Team To Dr. D.

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

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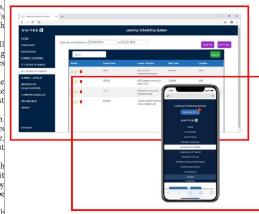
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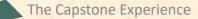
Michigan State University

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Chicago, Illinois Lynda McDaniel Houston, Texas Tom Wilson Chicago, Illinois

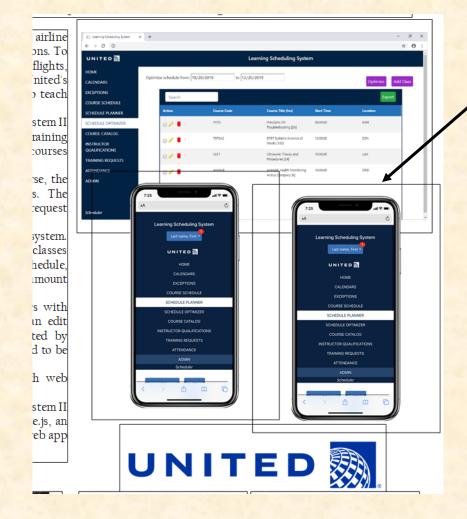
PAGE N + 24



3 Artwork Draft From Team To Dr. D.



3 Artwork Draft Feedback by Dr. D.



Dr. D. duplicated existing artwork to illustrate requested update.

3 Artwork Update From Team To Dr. D.

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

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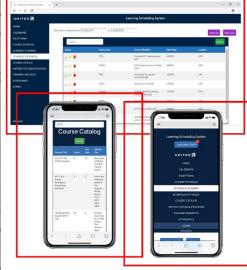
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Josh Pezeshki

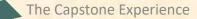
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Michigan State University

Team Members (left to right)

Chicago, Illinois Chicago, Illinois Chicago, Illinois Chicago, Illinois Rick Brown Chicago, Illinois Lynda McDaniel Houston, Texas Tem Willison Chicago, Illinois

PAGE N + 24



Design Day Booklet Production Process

4 Final Update From Team To Dr. D.

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

United Airlines Training Scheduling and Optimization System II

United Airlines is the world's second largest airline company, operating 4,600 flights a day to 357 destinations. To maintain its fleet of 1,300 aircraft and ensure successful flights, it is crucial to have properly trained personnel. United's Technical Operations division has 45 instructors who teach around 700 classes yearly to over 7,000 employees.

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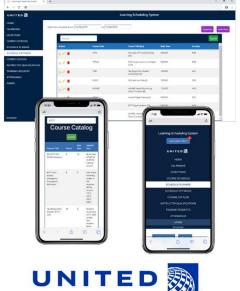
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PAGE N + 24



Michigan State University Team Members (left to right) Josh Pezeshki Anadou Anne

Chicago, Illinois Jamie Hill Chicago, Illinois Lynda McDaniel Houston, Texas Tom Wilson Chicago, Illinois

Chicago, Illinois

Craig Bennett

Chicago, Illinois

Rick Brown

PAGE N *

ranklin. Michigar

aperville, Illinois

vonia, Michigan

ivonia, Michigan

Andrew Ferguson

Jack Soenke

Laura Danila

4 **Final Version** From Dr. D. **To Designer**

Computer Science CSE498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

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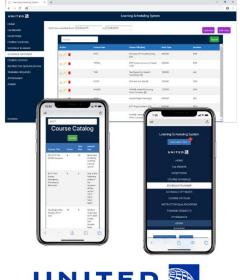
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United Airlines

Design Day Booklet

CSE 498 / 8:00 a.m. - Noon Engineering Building, 1300 Hallway | First Floor

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Laura Danila Livonia, Michigan

Andrew Ferguson Livonia, Michigan **Jamie Hill** Chicago, Illinois

Rick Brown

United Airlines

Project Sponsors

Craig Bennett

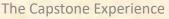
Chicago, Illinois

Chicago, Illinois

Lynda McDaniel Houston, Texas

Tom Wilson Chicago, Illinois

PAGE 46



Design Day Booklet Production Process

Design Day Booklet Production Schedule

Weekday	Date	Task	Elapsed Days
Tuesday	October 6	Dr. D. posts zipped folders with templates for downloading.	0
Wednesday	October 7	Dr. D. discusses process at all-hands meeting,	1
Saturday	October 10	Teams submit zipped folders with first draft by 11:59 p.m.	4
Sunday	October 11	TAs begin editing project descriptions.	5
Sunday	October 11	Dr. D. edits the artwork and creates artwork feedback.	5
Sunday	October 11	Dr. D. posts zipped folders with artwork feedback for downloading.	5
Sunday	October 11	Teams begin updating artwork.	5
Monday	October 12	Dr. D. discusses artwork feedback at all-hands meeting	6
Monday	October 12	TAs. discusses project descriptions at split-hands meeting	6
Monday	October 12	Teams submit zipped folders with updated artwork by 11:59 p.m.	6
Tuesday	October 13	Dr. D. edits the artwork and creates artwork feedback.	7
Tuesday	October 13	Dr. D. posts zipped folders with artwork feedback for downloading.	7
Tuesday	October 13	TAs submit project description edits by 11:59 p.m.	7
Wednesday	October 14	Dr. D. discusses artwork feedback at all-hands meeting.	8
Wednesday	October 14	TAs. discusses project descriptions at split-hands meeting	8
Wednesday	October 14	TAs and Jill meet to discuss project descriptions.	8
Wednesday	October 14	Jill begins editing project descriptions.	8
Wednesday	October 14	Teams submit zipped folders with updated artwork by 11:59 p.m.	8
Friday	October 16	Jill submits project description edits by 8:00 a.m.	10
Friday	October 16	TAs and Jill meet to discuss project descriptions.	10
Friday	October 16	TAs begin final editing project descriptions.	10
Saturday	October 17	TAs submit project description edits by 11:59 p.m.	11
Sunday	October 18	Dr. D. posts final version of project descriptions.	12
Monday	October 19	Dr. D. discusses project descriptions at all-hands meeting.	13
Tuesday	October 20	Teams submit final version of project description by 11:50 p.m.	14
Wednesday	October 21	Dr. D. discusses any remaining issues at all-hands meeting.	15
Thursday	October 22	Dr. D. merges final artwork with final project description.	16
Thursday		Dr. D. posts zipped folders with final version for downloading.	16
Saturday Sunday		Teams submit zipped folders with final version by 11:59 p.m. Dr. D. submits zipped booklet assets to graphic designer.	18 19

Design Day Production Schedule

The Capstone Experience

29

Oc

Octobe	r 2020			October 2020 Su Mo Tu We Th 4 5 6 7 8 11 12 13 14 15 18 19 20 21 22 25 26 27 28 29	Fr Sa Su Mo	Wovember 2020 Tu We Th Fr Sa 3 4 5 6 7 10 11 12 13 14 17 18 19 20 21 24 25 26 27 28
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Sep 27	28	29	30	Oct 1	2	3
					sign Day oduction	
4	5	6 Dr. Posts Zip Templates	7 Dr D Discusses Process at All-Hands	8 <u>Ca</u>	alendar	10 Teams Submit Zip by 11:59pm
11 1. Dr D Edits Artwork 2. Dr Posts Artwork 3. TAs Edit Proj Desc 4. Teams Update Artwork	12 1, Dr D Discusses Discusses Artwork 2. TAs Discuss Proj Desc 3. Teams by Submit Artwork 11:59pm	13 1. Dr D Edits Artwork 2. Dr Posts Artwork 3. TAs Submit Proj Desc by 11:59pm	14 1. Dr D Discusses Discusses Artwork 2. TAS Discuss Proj Desc 3. TAS & JB Discuss PDs 4. JB Edits Proj Desc 5. Teams Submit	15	16 1. JB Submits PDs by 8:00am 2. TAs & JB Discuss PDs 3. TAs Edit Proj Desc	17 TAs Submit Proj Desc by 11:59pm
18 Dr D Posts Final PDS	19 Dr D Discusses Final PDS	20	21 Dr D Discusses Process at All-Hands	22 1. Dr D Discusses Merges Art & PDs 2. Dr. Posts Final Zips	23	24 Teams Submit Final Zips by 11:59pm
25 Dr D Submits Assets to Designer	26	27	28	29	30	31

Dyksen, Wayne

The Capstone Experience

1 Design Day Booklet Production Process

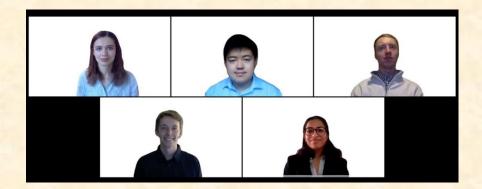
Submission

- READ Instructions Carefully
- Zipped Assets Folder
 - Name: team-urban-science-design-day-booklet-page
 - Contents
 - team-urban-science-design-day-booklet-page.docx
 - team-urban-science-artwork-1.png (Very High Resolution)
 - team-urban-science-artwork-2.png (Very High Resolution)
 - team-urban-science-artwork-3.png (Very High Resolution)
 - Delete unused placeholder artwork files.
 - Zipped
- - Subject: Team Urban Science Design Day Booklet Project Page
 - Body
 - o Not Blank
 - Something Professional
 - Attachment
 - Zipped Assets Folder
 - team-urban-science-design-day-booklet-page.zip
 - Due 11:59 p.m., Saturday, October 10.

The Capstone Experience

[1 of 4]

- Zoom Screen Grabs
 - Some Okay
 - Some Terrible
 - None Great



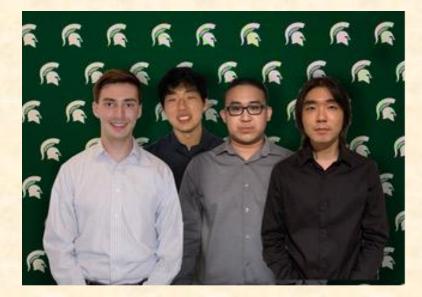




Tom Gennara

- Individual Submitted Photos
- Photoshopped Into Team Photo
- Examples Based On Good Photos, Not Teams





[2 of 4]

Individual Photos Requirements

Front Facing
Hands down to the sides
Hands out of pockets
¾ Length, Just Below Knees
High Resolution as Possible
Solid Background
Good Lighting



[3 of 4]

Design Day Booklet Production Process

Resubmit

Use Google Form (Link Emailed to You)
May Use Same Photo if Meets Above Requirements
Due by 5:00 p.m. ET, Friday, October 9
This is <u>not</u> a test.
Failure to Submit
Not in Team Photo
Points Deducted from Team Contribution



[4 of 4]

What's ahead?

[1 of 2]

Schedule

- = 10/06: Dr. D. posts team page template zipped folder.
- = 10/07: We discuss production at all-hands.
- 10/09: Submit Individual Photos
- 10/10: Team submits first draft via zipped team folder.
- 10/18: Alpha Presentation Slide Decks
- 10/19: Team Alpha Presentations ←13 Days
- 10/24: DD Booklet Team Page Submitted by Team
- 11/16: Beta Presentations
- 12/07: Project Videos
- 12/09: All Deliverables
- 12/11: Design Day

What's ahead?

[2 of 2]

- Alpha Presentation Conflicts? Email To Dr. D. & Cc TA
- Request for Excused Absence? Email To TA & Cc Dr. D.
- Attendance
 - All-Hands, Split-Hands, Triage, and Team Meetings
 - 5% of Final Grade
 - Can Be Negative