10/04: Design Day Booklet Production Process

The Capstone Experience

Dr. Wayne Dyksen
James Mariani

Department of Computer Science and Engineering
Michigan State University
Fall 2022
Design Day Booklet

• Professional Publication
  ▪ Corporate Relations
  ▪ Alumni Relations
  ▪ Recruiting
  ▪ Keepsake for You

• Contents
  ▪ Schedule of Events
  ▪ Project Descriptions
The Capstone Experience

- Professional Publication
  - Corporate Relations
  - Alumni Relations
  - Recruiting
- Contents
  - Capstone Projects
  - Academic Year
Team Project Page

• Template Distributed by Dr. D.
  ▪ Sponsor’s “Official” Name
  ▪ Sponsor Logo
  ▪ Project Title
  ▪ MSU Team Photo
  ▪ MSU Team Members’ Names
  ▪ Corporate Sponsors’ Names
  ▪ Headers and Footers
  ▪ Posted On Downloads Page

• Template Completed by Team
  ▪ Project Description
  ▪ Artwork
  ▪ Use Microsoft Windows Office 365 Version of Word.
Team’s Job

- Read instructions carefully.
- Check everything.
- Use Microsoft Windows Office 365 version of Word.
- Make a checklist.
- Write the project description.
- Read the instructions carefully.
- Provide the artwork.
- Read the instructions carefully.
- Update the project description and artwork.
- Make a checklist.
- Check everything 100 times.
- Read the instructions carefully.
- Make a checklist. ← Key

Note: Many slides in this deck are “reference slides,” hence wordy.
• Read the instructions carefully. ← Have I mentioned this yet?
• Newspaper / Magazine Style
• Target Audience == General Public
• Do NOT Start...
  ▪ “Our project is...”
  ▪ “Our sponsor asked us to...”
  ▪ “Our project aims to...”
• Use present tense throughout.
• Write as though your project is complete.
  ▪ It works.
  ▪ Your sponsor is using it.
• Fill the entire textbox, no less, no more.
• Read Past Examples
  ▪ The Capstone Experience Booklet
  ▪ Previous Design Day Booklets (Design Day > Booklet)
  ▪ MSU Men’s Basketball
• Make a Checklist ← Have I mentioned this yet?
Project Description

• Beginning
  ▪ Sponsor Overview
  ▪ 2 to 3 Lines

• Middle
  ▪ The Problem & Your Solution
  ▪ Magazine Style
  ▪ Understandable by Non-Technical Person

• End
  ▪ Technical Jargon
  ▪ 2 to 3 Lines
Volkswagen Group of America is the North American operation headquarters and subsidiary of the Volkswagen Group, one of the world's leading automobile manufacturers. They are comprised of 8,000 employees in the United States and sell their vehicles through a 1,000-strong dealer network.

Electric vehicles are one of the latest innovations in the automobile industry. Volkswagen, who just released their first electric vehicle, the ID.4, want a way to show potential customers the benefits of electric vehicles compared to gas powered vehicles as well as address and correct some of the common misconceptions many people have about electric vehicles.

Our VW Car-Net Electric Vehicle Route Planner application is displayed in Volkswagen dealerships and educates potential car buyers about the benefits of buying an electric vehicle.

A major concern many buyers have about electric vehicles is the car’s range and charging options available on the road. Our application generates driving routes for gas vehicles and electric vehicles that stop at charging stations. Buyers can compare these various routes with respect to route length, route path, fuel costs and carbon emissions.

Our application also allows for extensive customizability including sliders to adjust starting battery charge, climate control, temperature and weather conditions to account for the effects these factors have on battery consumption.

Our Electric Vehicle Route Planner helps assuage the fears of potential electric vehicle buyers by showing them that their daily routine will have minimal disruptions, and significant benefits if they switch to an electric vehicle.

Our Electric Vehicle Route Planner is developed as an Android application that utilizes API calls to handle route altering attributes and route generation. Our application is written in Kotlin.
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 carefully.
- 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 entire artwork space. Whitespace is bad!
- Overlap artwork if necessary.
- Include “framing” for web and mobile apps.
  - Browser with Window Frame
  - iPhone, iPad
  - Android Phone or Tablet
  - NOT Laptop or Desktop
  - See https://mockuphone.com.
  - Eliminate shadows.
Artwork

• Read the instructions carefully. Have I mentioned this yet?
• 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, Fall 2021
  ▪ Previous Design Day Booklets (Design Day > Booklet)
  ▪ MSU Men’s Basketball
• Make a Checklist Have I mentioned this yet?
Artwork

White Whitespace

Too Much Transparent Whitespace

Nicely Cropped Transparent Whitespace
Artwork Whitespace Issues

Key Think about our graphical designer copying, pasting, resizing and positioning your artwork.

Look Identical
Artwork Whitespace Issues

Border Shows Transparent Whitespace
Artwork Whitespace Issues

Select All. Rescale to 3” Height.
Download Design Day Artwork Whitespace Tester
Artwork Border Issues
Artwork Border Issues

Issue Fixed
Border Added
Artwork Border Issues
Artwork Border Issues

Issue Fixed
Border Added
Artwork Border Issues
Artwork Border Issues

Issue Fixed
Border Added
Artwork Who’s on first?
Artwork Who’s on first?
Artwork Who’s on first?

Changed color of textbox background.

Artwork has transparent background.
Artwork Who’s on first?

Changed color of textbox background.

Artwork has white background, which is wrong. Why does this matter?
Artwork Example

Amazon
AVAST: Amazon Video And Shopping Technology

Founded 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 so 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 backend 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 RCE2 to host the AVAST website.

Michigan State University
Team Members (left to right):
- Linshen Fang
- Xiaowei Zhang
- Chen Chen
- Dan Neschukiew
- Oak Park, Michigan
- Patrick McCormick
- Southfield, Michigan
- Ian McGeever
- Canton, Michigan
- Han Wang
- Novi, Michigan

Amazon
Project Sponsors
- Garrett Geary
- Detroit, Michigan
- David Getz
- Detroit, Michigan
- Kyle Evans
- Detroit, Michigan
- Pete Hefley
- Detroit, Michigan

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Artwork Example

Aptiv is a global technology company that is transforming mobility with its portfolio of safe, efficient, 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 U.S., 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 view 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 an 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 ongoing 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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Artwork Example

The Capstone Experience Design Day Booklet Production Process
Artwork Example

Proofpoint
Improved Detonation of Evasive Malware

Housed in Sunnyvale, California, Proofpoint provides cybersecurity to many organizations, including Fortune 500 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 threat.

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 the malware to block its ability to detect the sandbox environment, which causes it to terminate. 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 evasive techniques being used. Both harmless and harmful malware results are presented.

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

Michigan State University Team Members (left to right):
Jack Moccianti
Brenda Hild, Michigan
Tai Pan
Canton, Michigan
Sean Joseph
Grand Ledge, Michigan
Ryan Gallant
Midland, Michigan
Ian Murray
Midland, Michigan

Proofpoint Project Members
Lar偷e Aiko
Sunnyvale, California
Knut See
Sunnyvale, California
Brad Woodberg
Joy, Michigan

PAGE 37
The Capstone Experience

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

Founded in 1917, 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 28,000 members and over $1.3 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 mainstream MSUFCU’s technological edge by expanding existing 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 app 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 MSUFCU database through JSON. The administrative web portal is written in PHP.

Michigan State University
Team Members (left to right)
Stevie Jorgenson
Sarah Miller
Erica Oldham
Kieran Hall
Kris Kaczmarek
Will Roden
Ethan Boyd
Chad Clifton
Marketing and Sales

MSUFCU
Project Spoons
Saraphina Ambagappa
East Lansing, Michigan
April Clarke
East Lansing, Michigan
Emily Fiedler
East Lansing, Michigan
Colin Lockwood
East Lansing, Michigan
Andy Lynch
East Lansing, Michigan
Ben Master
East Lansing, Michigan
Andy Wardell
East Lansing, Michigan

Please state your 4-digit security code.

1234

You have $15.32 in your checking account.

What is my checking account balance?

$15.32

Your balances

Checking: $15.32
Savings: $6.85

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Previous Artwork Feedback

• Study Carefully to Learn
  ▪ What to Do
  ▪ What NOT to Do

• Posted on Downloads Page
  ▪ Design Day Booklet Feedback, Fall 2021
  ▪ Design Day Booklet Feedback, Spring 2022
Michigan State University Men's Basketball
Spartan Basketball Player Timer

NC A 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 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 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 Timer is written in Visual Basic. The underlying database is Microsoft Access.
The DD Booklet Production Process

- Zip Folders to Teams
- Zip Folders From Teams
- Edit Artwork Dr. D
- Edit Project Descriptions James, TMs & Jill
- Merge Edits Dr. D.
- Zip Folders To Designer

February 19
11:59 p.m.
United Airlines
Training Scheduling and Optimization System II

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

For examples, see previous Design Day booklets, which you can find here.

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

The text boxes have red outlines for handles. The text boxes have red outlines for handles.

There are four placeholders for artwork.

The text boxes have red outlines for handles.

Each textbox includes one embedded placeholder artwork, a grey png image.

To add your artwork, right-click on grey image and select Change Picture.

To add your artwork, right-click on grey image and select Change Picture.

Delete the textboxes placeholders you don’t need.

Do NOT create your own textboxes for artwork.

Do NOT create your own textboxes.

All of the textboxes are named for processing.

If necessary, start over from the original downloaded template.
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, 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 Pecenelli
Farid, Michigan
Jack Goosue
Naperville, Illinois
Laura Mamula
Lauren, Michigan
Andrea Ferguson
Lauren, Michigan

United Airlines
Project Sponsors
Amadon Arno
Chicago, Illinois
Craig Bennett
Chicago, Illinois
Rick Brown
Chicago, Illinois
Lynda Refaeli
Houston, Texas
Tom Williams
Chicago, Illinois
2 Project Description Draft
From Team To Dr. D.

Read aloud.

Search your project description for the word “will.”
**United Airlines**

**Training Scheduling and Optimization System II**

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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.

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.

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**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.
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---

**Michigan State University**

*Team Members (left to right)*

- Josh Peceski
- Patrick, Michigan
- Jack Socha
- Naperville, Illinois
- Laura Gamble
- Lansing, Michigan
- Andrew Ferguson
- Lansing, Michigan

**United Airlines**

*Project Sponsors*

- Andrew Amore
- Chicago, Illinois
- Craig Bennett
- Chicago, Illinois
- Rick Brown
- Chicago, Illinois
- Lynda Buchanan
- Houston, Texas
- Tom Wills
- Chicago, Illinois
3 Project Description Edits By Jill

United Airlines
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Michigan State University
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Laura Eberly
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Andrew Ferguson
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Nick Brun
Chicago, Illinois
Lynda McDaniel
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Tam Wilson
Chicago, Illinois
United Airlines
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Michigan State University
Team Members (left to right):
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Laura Emilia
Lynda Ferguson
Chicago, Michigan

United Airlines
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Amador Arce
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Craig Bennett
Chicago, Illinois
Rick Brown
Chicago, Illinois
Lynda McDaniel
Houston, Texas
Tom Wilson
Chicago, Illinois
3 Artwork Draft From Team To Dr. D.

What’s wrong with this artwork?
3
Artwork Draft
Feedback by Dr. D.

Dr. D. duplicated existing artwork to illustrate requested update.
3
Artwork Update
From Team To Dr. D.

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 65 instructors, who teach around 700 classes yearly to over 7,000 employees.

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Michigan State University
Team Members (left to right)
Josh Piercebli
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Jack Goode
Naperville, Illinois
Laura Emile
Laura, Michigan
Andrew Ferguson
Lansing, Michigan

United Airlines
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Craig Bennett
Chicago, Illinois
Rick Brown
Chicago, Illinois
Lynda McDaniel
Houston, Texas
Tom Wilkins
Chicago, Illinois
Final Update
From Team
To Dr. D.

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 1,000 aircraft and ensure successful flights, it is crucial to have properly trained personnel. United’s Technical Operations division has 45 instructors that 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 mobile-optimized website, 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 and students, and 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 qualifications and room availabilities.

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

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.
Final Version
From Dr. D.
To Designer

United Airlines
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Michigan State University
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Patrick McGahan
Jack Geahe
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Laura Eramo
Laura, Michigan
Andrew Ferguson
Lansing, Michigan

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Chicago, Illinois
Craig Bennett
Chicago, Illinois
Rick Brown
Chicago, Illinois
Jamie Hill
Chicago, Illinois
Lynda McKinley
Houston, Texas
Tom Wilson
Chicago, Illinois
United Airlines
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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.

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 mobile-compatible website, 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 and 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 qualifications and room availability.

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

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.

United Airlines
Project Sponsors
Amazon Air
Chicago, Illinois
Craig Bennett
Chicago, Illinois
Rick Brown
Chicago, Illinois
Jamie Hill
Chicago, Illinois
Lyndia McDaniel
Houston, Texas
Tom Wilson
Chicago, Illinois

Michigan State University
Team Members (left to right)
Jord Ploshnitzki
Franklin, Michigan
Jack Swoke
Naperville, Illinois
Laura Daniil
Livonia, Michigan
Andrew Ferguson
Livonia, Michigan

CSE 498 / 8:00 a.m. - Noon   Engineering Building, 1300 Hallway | First Floor
### Design Day Production Schedule

<table>
<thead>
<tr>
<th>Weekday</th>
<th>Date</th>
<th>Task</th>
<th>Elapsed Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>October 3</td>
<td>Dr. D. posts zipped folders with templates for downloading.</td>
<td>0</td>
</tr>
<tr>
<td>Tuesday</td>
<td>October 4</td>
<td>Dr. D. discusses process at all-hands meeting.</td>
<td>1</td>
</tr>
<tr>
<td>Friday</td>
<td>October 7</td>
<td>Teams submit zipped folders with first draft by 11:59 p.m.</td>
<td>4</td>
</tr>
<tr>
<td>Sunday</td>
<td>October 9</td>
<td>Dr. D. edits the artwork and creates artwork feedback.</td>
<td>6</td>
</tr>
<tr>
<td>Sunday</td>
<td>October 9</td>
<td>Dr. D. posts zipped folders with artwork feedback for downloading.</td>
<td>6</td>
</tr>
<tr>
<td>Sunday</td>
<td>October 9</td>
<td>TMs begin editing project descriptions.</td>
<td>6</td>
</tr>
<tr>
<td>Sunday</td>
<td>October 9</td>
<td>Teams begin updating artwork.</td>
<td>6</td>
</tr>
<tr>
<td>Tuesday</td>
<td>October 11</td>
<td>Dr. D. discusses artwork feedback at all-hands meeting.</td>
<td>8</td>
</tr>
<tr>
<td>Tuesday</td>
<td>October 11</td>
<td>TMs discuss project descriptions at split-hands meeting.</td>
<td>8</td>
</tr>
<tr>
<td>Tuesday</td>
<td>October 11</td>
<td>Teams submit zipped folders with updated artwork by 11:59 p.m.</td>
<td>8</td>
</tr>
<tr>
<td>Wednesday</td>
<td>October 12</td>
<td>Dr. D. edits the artwork and creates artwork feedback.</td>
<td>9</td>
</tr>
<tr>
<td>Wednesday</td>
<td>October 12</td>
<td>Dr. D. posts zipped folders with artwork feedback for downloading.</td>
<td>9</td>
</tr>
<tr>
<td>Wednesday</td>
<td>October 12</td>
<td>TMs submit project description edits by 11:59 p.m.</td>
<td>9</td>
</tr>
<tr>
<td>Thursday</td>
<td>October 13</td>
<td>Dr. D. discusses artwork feedback at all-hands meeting.</td>
<td>10</td>
</tr>
<tr>
<td>Thursday</td>
<td>October 13</td>
<td>TMs discuss project descriptions at all-hands meeting.</td>
<td>10</td>
</tr>
<tr>
<td>Thursday</td>
<td>October 13</td>
<td>TMs and Jill meet to discuss project descriptions.</td>
<td>10</td>
</tr>
<tr>
<td>Thursday</td>
<td>October 13</td>
<td>Jill begins editing project descriptions.</td>
<td>10</td>
</tr>
<tr>
<td>Thursday</td>
<td>October 13</td>
<td>Teams submit zipped folders with updated artwork by 11:59 p.m.</td>
<td>10</td>
</tr>
<tr>
<td>Saturday</td>
<td>October 15</td>
<td>Jill submits project description edits by 8:00 a.m.</td>
<td>12</td>
</tr>
<tr>
<td>Saturday</td>
<td>October 15</td>
<td>TMs and Jill meet to discuss project descriptions.</td>
<td>12</td>
</tr>
<tr>
<td>Saturday</td>
<td>October 15</td>
<td>TMs begin final editing project descriptions.</td>
<td>12</td>
</tr>
<tr>
<td>Saturday</td>
<td>October 15</td>
<td>TMs submit project description edits by 11:59 p.m.</td>
<td>12</td>
</tr>
<tr>
<td>Sunday</td>
<td>October 16</td>
<td>Dr. D. posts final version of project descriptions.</td>
<td>13</td>
</tr>
<tr>
<td>Tuesday</td>
<td>October 18</td>
<td>Dr. D. discusses project descriptions at all-hands meeting.</td>
<td>15</td>
</tr>
<tr>
<td>Wednesday</td>
<td>October 19</td>
<td>Teams submit final version of project description by 11:59 p.m.</td>
<td>16</td>
</tr>
<tr>
<td>Thursday</td>
<td>October 20</td>
<td>Dr. D. discusses any remaining issues at all-hands meeting.</td>
<td>17</td>
</tr>
<tr>
<td>Thursday</td>
<td>October 20</td>
<td>Dr. D. posts final versions of zipped folders.</td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td>October 22</td>
<td>Dr. D. merges final artwork with final project description.</td>
<td>19</td>
</tr>
<tr>
<td>Sunday</td>
<td>October 23</td>
<td>Dr. D. submits zipped booklet assets to graphic designer.</td>
<td>20</td>
</tr>
</tbody>
</table>
## Design Day Production Calendar

<table>
<thead>
<tr>
<th>October 2022</th>
<th></th>
<th></th>
<th>October 2022</th>
<th></th>
<th></th>
<th>November 2022</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Su Mon Wed Th Fr Sa</td>
<td>Su Mon Wed Th Fr Sa</td>
<td>Su Mon Wed Th Fr Sa</td>
<td>Su Mon Wed Th Fr Sa</td>
<td>Su Mon Wed Th Fr Sa</td>
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<td>Su Mon Wed Th Fr Sa</td>
<td>Su Mon Wed Th Fr Sa</td>
<td>Su Mon Wed Th Fr Sa</td>
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<tr>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>Oct 1</td>
</tr>
<tr>
<td>Dr D Submits Assets to Designer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Design Day Production Calendar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>31</td>
<td>Nov 1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyksen, Wayne</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9/28/2022 1:45 PM</td>
</tr>
</tbody>
</table>
Zipped Assets Folder

- Link On Downloads Page
- Customized Per Team
- Contents
  - Project Page Template .docx
  - Four Template Artwork Files .png
- Do not change filenames.
- Example
  - team-amazon-design-day-booklet-page.zip
  - team-amazon-design-day-booklet-page.docx
  - team-amazon-artwork-1.png
  - team-amazon-artwork-2.png
  - team-amazon-artwork-3.png
  - team-amazon-artwork-4.png
Submission

• READ Submission Instructions Carefully
• Zipped Assets Folder
  ▪ Folder Name: team-urban-science-design-day-booklet-page
  ▪ Contents
    o team-urban-science-design-day-booklet-page.docx
    o team-urban-science-artwork-1.png (Very High Resolution)
    o team-urban-science-artwork-2.png (Very High Resolution)
    o team-urban-science-artwork-3.png (Very High Resolution)
  ▪ Delete unused placeholder artwork files.
  ▪ Zip Filename: team-urban-science-design-day-booklet-page.zip
• Upload to Microsoft Teams
  ▪ General Channel File Space
  ▪ Folder Named design-day-booklet-team-zip-files
  ▪ Team’s Private Channel File Space
  ▪ Due 11:59 p.m., Friday, October 7. ← This Friday
Design Day Grade

• 5% of Final Grade
• Two Factors
  ▪ Design Day Booklet Team Page Process
  ▪ Design Day Performance

• Design Day Booklet Process Deductions
  Including But Not Limited To...
  ▪ Project Description Errors and Effort to Rewrite
  ▪ Artwork Errors and Effort to Correct
  ▪ Failure to Use Windows Version of Office 365
  ▪ Submission Errors
What’s ahead?

• Upcoming Meetings
  ▪ 10/04: Design Day Booklet Production Process
  ▪ 10/06: Creating and Giving Presentations
  ▪ 10/11: Alpha Presentations
  ▪ 10/13: Alpha Presentations
  ▪ 10/18: Alpha Presentations
  ▪ 10/20: Resume Writing and Interviewing
  ▪ 11/15: Beta Presentations

← New
What’s ahead?

• Important Dates for Planning
  - 10/07: Design Day Booklet Zip File Due ←Friday
  - 10/10: Alpha Slide Decks Due ←New
  - 10/11: Design Day Updated Artwork Due ←New
  - 10/11: Alpha Presentations Start ←New
    Start Working Towards Beta Presentations ←Key
  - 11/14: Beta Slide Decks Due
  - 11/15: Beta Presentations Start
    Start Working on Project Videos ←Key
What’s ahead?

• Capstone Due Dates / Deadlines
  ▪ Published at Start of Semester
    o See Weekly Schedule
    o See Major Milestones
  ▪ Immovable
    o Your team depends on you.
    o You must get your tasks done on time.
    o Plan well in advance.
    o If you are “stuck,” ask for help sooner rather than later.
    o If you are not going to complete your tasks...
      ❖ ...tell your team well in advance of the deadline.
      ❖ ....another team member will complete your task.
      ❖ ...your team may be told they no longer need to depend on you.
Read Me

Presenting

– The purpose of the Alpha Presentation is to convince everyone that your team will be successful; that is, to convince everyone that your team has your project completely scoped, the specifications complete, and all risks mitigated so that you are capable of implementing your project, full-featured, and delivered it to your client, on time (Wednesday, December 7).
– The time limit for your presentation is 15 minutes, which will be strictly enforced. Practice your presentation to ensure that you will finish within the allotted time.
– Each team will share and “drive” the slide deck for their own team.
– Plan on spending most of your presentation demonstrating your software. A suggested approach is as follows.
  ▪ Very Brief Review of Project Overview
  ▪ Very Brief Review of System Architecture
  ▪ Software Demonstration (Skipping All of the Screen Shot Slides in Your Slide Deck)
  ▪ Brief Summary of What’s left to do?
– Your presentation should be professional, well rehearsed, and flow from beginning to end. Practice presenting using Microsoft Teams. Ensure that your slides are readable. Practice sharing your screens and demonstrating your software. Practice switching from one team member to another.
– As a backup to live demonstrations, consider making screen recordings of your software demonstrations using Camtasia.
– We will meet in two “split-hands” meetings with one Teams channel for Luke’s teams and one for Griffin’s teams.
– All team members are required to dress business casual on the day of their presentation. Business casual does not include sneakers, tennis shoes, hats, coats, hoodies, t-shirts or shirts that are not tucked into pants. Google “what is business casual.”
– All team members should turn their cameras on during their presentation.
– Although the presentations will be scheduled over the course of three meetings, all teams must be prepared to present on the first day scheduled, Thursday, October 13.
– The presentation schedule will be posted on our All-Hands Meetings page in the evening of Wednesday, October 12.
READ ME

• Creating and Editing
  – Use only the Windows version of Office 365.
  – 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 Alpha 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 are due to us and to your client by 11:59 p.m., Wednesday, October 12.
  – Name your PowerPoint slide deck file as “team-[team-name]-alpha-presentation.pptx” replacing “[team-name]” with your team’s name (using all lower case and replacing all blanks with dashes) in your filename as in “team-auto-owners-alpha-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 “Alpha Presentation Slide Decks” in our Microsoft Teams General Channel file space by 11:59 p.m., Wednesday, October 12. 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, and you need to prove that you did indeed upload your slide deck by the due date and time.
  – Email a copy of your slide deck to your client as well by 11:59 p.m., Wednesday, October 12. 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.
Alpha 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]
Department of Computer Science and Engineering
Michigan State University
Fall 2022
Project Overview

• Point 1
• Point 2
• Point 3
• Etc...
System Architecture

Include your system architecture diagram from your Project Plan presentation.

Update or redo your system architecture diagram if you were asked you to do so in your Project Plan presentation feedback.

Delete this textbox.
[Title of Screen Shot 1]

You must include at least four screenshots.

Include actual screen shots (i.e., not mockups), replacing [Title of Screen Shot] with an appropriate title.

You may duplicate the Screen Shot template slide as needed.

The screen shots should not contain any bordering transparent or whitespace. Use paint.net to crop them appropriately. ← Read this carefully.

If a slide contains more than one screen shot or additional artwork (like arrows), group all of the items into a single grouping so that it can be copied-and-pasted and resized as a single unit. ← Read this carefully.

Delete this textbox.
You must include at least four screenshots.

Include actual screen shots (i.e., not mockups), replacing [Title of Screen Shot] with an appropriate title.

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If a slide contains more than one screen shot or additional artwork (like arrows), group all of the items into a single grouping so that it can be copied-and-pasted and resized as a single unit. ↔ Read this carefully.

Delete this textbox.
What’s left to do?

• Task 1
• Task 2
• Task 3
• Task 4
• Etc

Don’t panic.

We do not expect that your project is done or even nearly done.

Simply give a list of the major tasks that you need to accomplish to complete your project.

Only include things that are relevant to your software system.

Do NOT include things such as “Update the Project Plan” or “Create Project Video.”

Delete this textbox.
Questions?