MICHIGAN STATE UNIVERSITY

10/02:

Creating and Giving Presentations

The Capstone Experience

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Department of Computer Science and Engineering Michigan State University

Fall 2019



Creating and Giving Presentations

- Creating
 - Organizing
 - Writing
 - Formatting
- Giving

Caveats

- Many Variations
 - Opinions
 - Situations
 - Audiences
 - Presenters
 - Etc...
- Seek Lots of Advice
- Hard to Generalize
- Always Exceptions to Every "Rule"
- · Do what works for you.



Creating and Giving Presentations

- ➤ Creating
 - **→**Organizing
 - Writing
 - Formatting
- Giving

Canonical Organization

- Title
- Introduction
- Contents
 - Section 1
 - Section 2

- Section N
- Conclusion

Force yourself to be organized.

Your presentation should have

- a beginning
- · an ending, and
- flow.

Introduction

- The Point
 - What's the point?
 - What's the purpose?
 - What's the "take away"?
- The Plan
 - Go Over Presentation
 - Contents
 - Organization
 - Solicit Audience Questions About Plan

Assume that your audience will only remember exactly one thing.

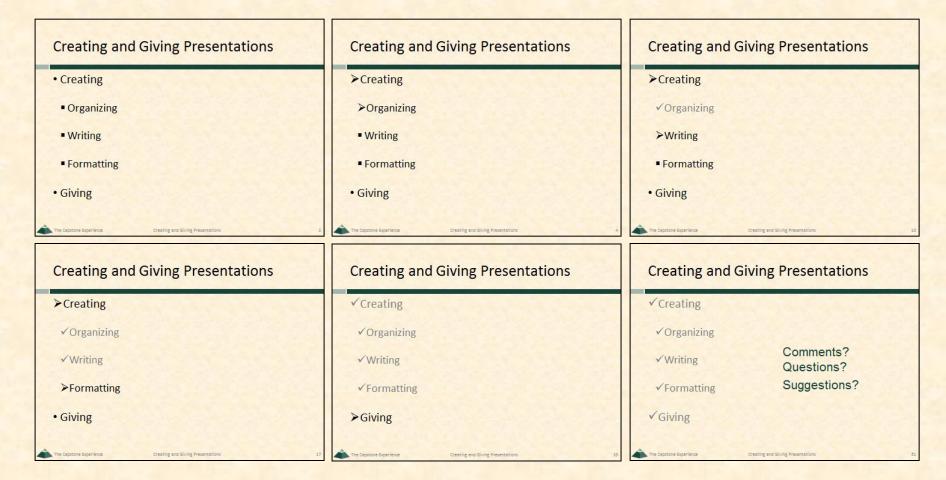
What do you want it to be?

Contents

- Plan For 5 10 Minutes Total Attention
- Plan on 1 2 Minutes Per Slide
- Create Continuous Flow
 - From Start to Finish
 - Avoid Forward References
- Keep Audience On Track
 - Use Contents Flow Mechanism
 - Where are we?
 - O What's done?
 - O What's left?



Contents Divider Slides





Conclusion

- Review
 - The Point
 - The Purpose
 - The "Take Aways"
- Solicit
 - Comments
 - Reactions
 - Questions
 - Suggestions
 - Action Items
 - Etc.

Assume that your audience will only remember exactly one thing.

What do you want it to be?

Creating and Giving Presentations

- ➤ Creating
 - ✓ Organizing
 - **>** Writing
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First Pass

- Create "Random" Slides (to Avoid Writer's Block)
 - Any Order
 - Title, With No Bullets
 - Bullets, With No Title
 - Ideas Slides(s)
 - Notes to Self
 - Fix Me
 - Insert Illustration/Picture/Graph Here
 - Say Something About...
 - o Etc...
- Edit, Prune & Organize Slides
- Create Contents & Divider Slides
- Refine

What messages do you want to convey?

Know Your Audience

- Technical
- Non-Technical
- Business
- Marketing / Sales
- Customers
- Management
- Investors
- Etc...



Know Your Time Limit

- Time Per Slide
 - Variable
 - Plan On 1 2 Minutes Per Slide
- Allow Time for Questions
 - Manage During Talk
 - Allocate At End
- Respect Time Limit
 - Do Not Go Over or Under
 - Over is bad.
 - Slightly under is good.
- Practice



Less is more.

- Less
 - Slides
 - Bullet Points Per Slide
 - Words Per Bullet Point
- Chose Carefully
 - Slides
 - Bullet Points
 - Words
- Prune Continually
- Exceptions
 - Slides are Reference Document
 - Trying to Make a Point

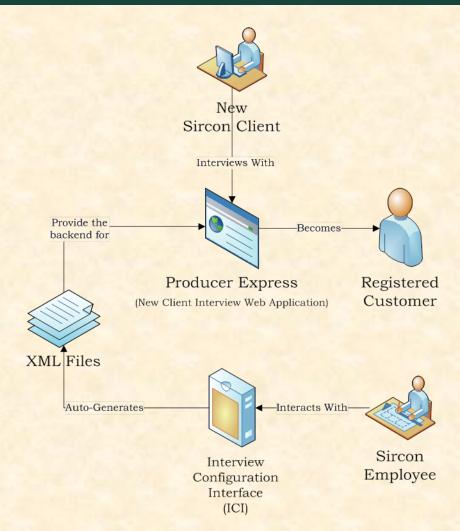


"Pictures"

- Worth 1,000 of Words
 - Photos
 - Videos
 - Illustrations
 - Diagrams
 - Graphs
 - Charts
 - Clip Art

The Capstone Experience

But Keep Simple



Clip Art Warning

Can Be Too...

- Distracting
- Much
- Trivial
- Goofy
- Ugly











Creating and Giving Presentations

- ➤ Creating
 - ✓ Organizing
 - ✓ Writing
 - **→** Formatting
- Giving

Bullet Points

- Less is more.
 - Less Points Per Slide
 - Less Words Per Point
- Two or More
 - At Each Level
 - Avoid Single Point
- Avoid
 - Single Point
- Exception
 - Slide Deck is Reference Document
- Details Required
 The Capstone Experience



Consistent Case

- Sentence case
 - First word uppercase
 - Other words lowercase
- lower case
 - all words lowercase
 - no punctuation
- Title Case
 - All Words Uppercase
 - No Punctuation
- Hybrid Scheme
 - Title Case For Sentence Fragments
 - Use sentence case for complete sentences.

Your Choice

Be Consistent

Can Use Hybrid Scheme

Inconsistent Styles

- Some people use all kinds of styles in a presentation and on a given slide.
- Annoying
- style guide.
- Use of sentence Fragments Okay.
- important point
- Another Important Point
- Both Title Case and sentence case mixed.
- This slide makes the speaker look careless.

Readability

Unreadable

. Annoying

- Readability Varies
- Test
 - In Advance
 - In Actual Setting



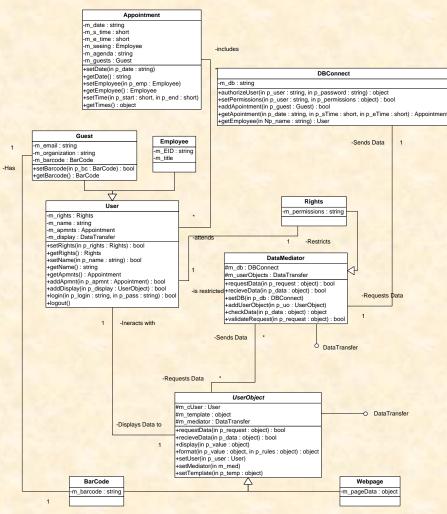
Directions to Spartan Stadium

- US 96 West
- US 127 North
- Exit Trowbridge
- Left on Harrison
- Right on Shaw Lane
- Stadium on Left



"I know you can't see this map but..."

Class Diagram



"I know you can't read this but..."

Really Important Quote

"When, in the course of human events, it becomes necessary for one people to dissolve the political bonds which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness. That to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed. That whenever any form of government becomes destructive to these ends, it is the right of the people to alter or to abolish it, and to institute new government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their safety and happiness. Prudence, indeed, will dictate that governments long established should not be changed for light and transient causes; and accordingly all experience hath shown that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same object evinces a design to reduce them under absolute despotism, it is their right, it is their duty, to throw off such government, and to provide new guards for their future security. --Such has been the patient sufferance of these colonies; and such is now the necessity which constrains them to alter their former systems of government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute tyranny over these states. To prove this, let facts be submitted to a candid world."

"I know you can't read this whole thing but..."

Too Much Information

- The first thing you should do is ask yourself "What's the point?"
 Every presentation should have a main point. What message are you
 trying to get across to your audience? If your audience will only
 remember one thing from your presentation, what do you want it to
 be?
- It's important to know your audience. The content will depend on the audience. Research your audience to determine the types of attendees and their expectations.
- Do not put too much information on any one slide. Fewer bullet points is better than many. Use a few words as possible per bullet. Sentence Fragments are okay.
- Chose fonts that are the appropriate sizes. If a font is too small, it may be unreadable. If a font is to large, it may be annoying.
- While a picture may be worth a thousand words, too many pictures or too much clip art can be distracting. And, avoid the use of goofy looking clip art.

Emphasis

- Use One of...
 - Boldface
 - Italics
 - Underline
- Do Not Over Use
- Avoid
 - ALL CAPS IS FROM TYPEWRITER DAYS
 - BOLDFACE AND ALL CAPS AND UNDERLINE

Color

- Good If
 - "Right" Colors
 - o Readable
 - Coordinates
 - Not Overdone
- Bad If
 - "Wrong" Colors
 - Not Readable
 - Clashes
 - Overuse of color can be very annoying.
- Some people are colorblind.
- Color Varies by Media (LCD, Projector, Paper, Etc.)
- Consult a professional.
- Test
 - In Advance
 - For Actual Usage (Projecting, Printing, Etc...)
 - In Actual Setting
 - o Room
 - Equipment
 - o Time of Day



Transitions and Animations

- Transitions
 - From Slide to Slide
 - Simple Better
 - Be Consistent
- Animations
 - Bullets Within a Slide
 - Simple Better
 - Use Only If Necessary
 - NB: Take Time



Clip Art Warning

Can Be Too...

- Distracting
- Much
- Trivial
- Goofy
- Ugly











Really Important Quote

"When, in the course of human events, it becomes necessary for one people to dissolve the political bonds which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

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"I know you can't read this whole thing but..."

Animated Bullet Points

- Take Time
- To Reveal
- Must Advance and Wait
- For Each Bullet Point Animated
- May Keep Looking at Slide
- To Know When To Press Button
- May Accidently Go to Next Slide

Don't Use Animations

- If
- You're
- Not
- Really
- Going
- To
- Use
- Them

Remember...

Animations use up precious time.

Spelling and Grammar

- Mistaeks
 - Easy Too Do
 - Far To Common
 - Unexceptable
 - Make Uoy Look Bad
- Use
 - Spell Checker
 - Grammar Checker
 - Multiple Other People
 - Corporate Editor



Use Color and Grey to Highlight

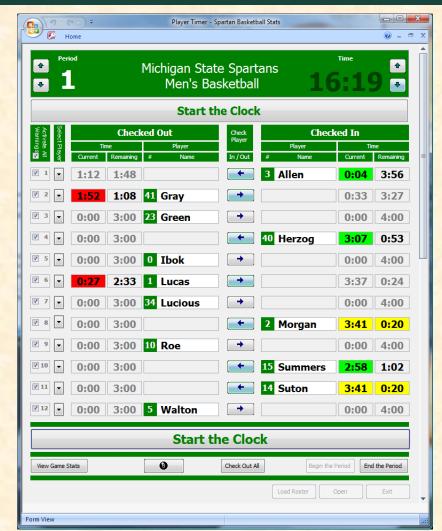
- Make Grey Version of Image
 - Copy Image
 - Picture Tools > Color > Recolor
- Overlay Images
 - Select Grey Image
 - Picture Tools > Send Backward > Send to Back
 - Select Both Images
 - Picture Tools > Align > Center
 - Picture Tools > Align > Middle
- Highlight Area
 - Select Color Image
 - Picture Tools > Crop > Crop
 - Grab and Slide Crop Indicators on Edges
- Group
 - Select Both Images
 - Picture Tools > Group > Group



NB: Example of Reference Slide

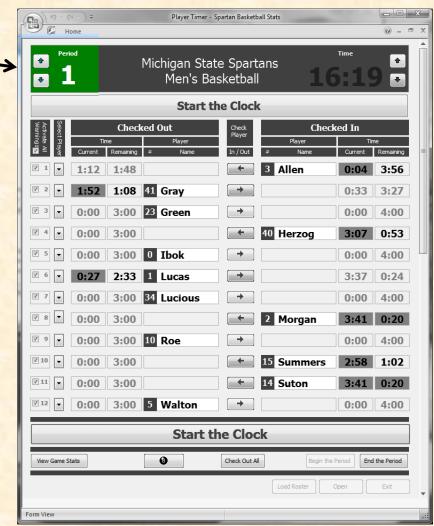
Player Timer App Features

- Set Period
- Check In/Out Players
- Start/Stop Clock
- Adjust Clock



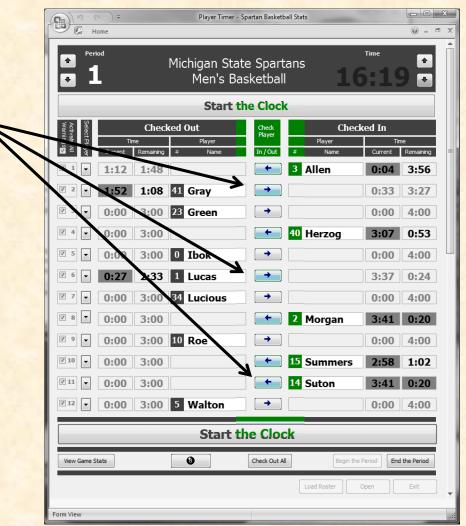
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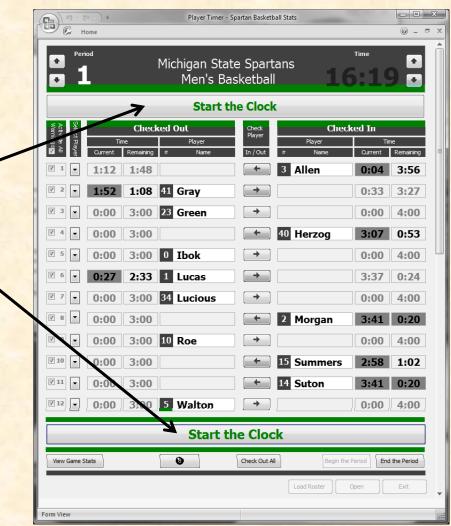
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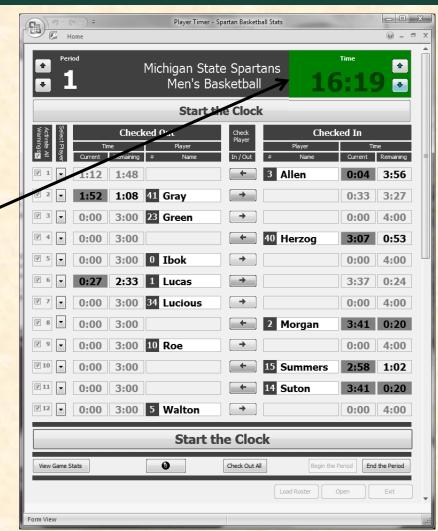
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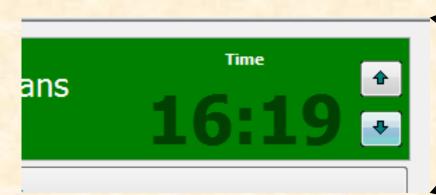


Player Timer App Features

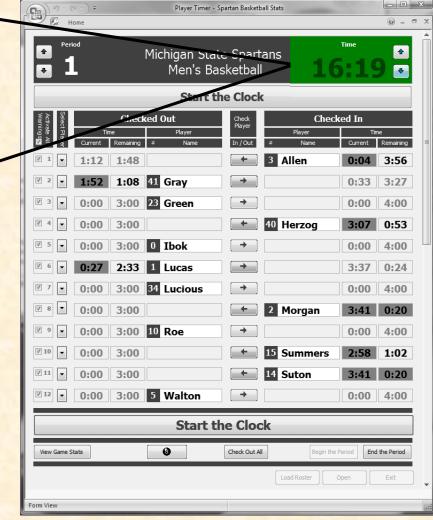
- Set Period
- Check In/Out Players
- Start/Stop Clock
- Adjust Clock -



Adjusting the Clock



- When Game Clock Stopped
- Add/Subtract Seconds
- Synchronize with Game Clock



Corporate Resources

- Standards
 - Style Guide
 - Presentation Templates
 - Graphics
- People
 - Writers
 - Graphic Designers
 - Editors

Creating and Giving Presentations

- ✓ Creating
 - ✓ Organizing
 - ✓ Writing
 - √ Formatting
- **>**Giving

Managing Equipment

- No Excuses
- Check Everything In Advance
 - Projector / Projection / Laptop Connection
 - Sound
 - Network Connections
 - Wireless Presentation Devices
 - Etc...
- Make Checklist of Things To
 - Bring
 - o Cables
 - Power Brick
 - Batteries
 - Presentation on USB Stick
 - o Etc...
 - Do
 - Plug Laptop to Power Outlet
 - Connect to Network / Register MAC Address
 - o Etc...



Managing Yourself

- Look Appropriate
 - Dress (Know the Dress Code)
 - Hygiene
- Eliminate Nervous Habit "Temptations"
 - Empty Pockets (Change, Keys,...)
 - Take Off Necklace
 - Spit Out Gum
 - Etc...
- Be Careful With Wireless Presenter



Managing Yourself

- Watch Your Language
 - Grammar
 - "Him and I are working on that."
 - o "Me and two others on the team..."
 - o "I ain't sure about that."
 - Offensive
 - Regional or Cultural Ism's or Idiomatic Expressions
 - Politically Incorrect and/or Insensitive
 - Use of "He", "Guy", "She", "Girl", "Gal", "You Guys"...
 - Use of "Old" When Referring to People
 - Terms Like "Secretary" or "Janitor" or ...
 - o Etc...
- Avoid Dry Mouth
 - Bring Bottle(s) of Water (But Be Careful)
 - Suck on Cough Drop (But Only If Not Annoying)
 - Apply Vaseline to Teeth and Gums ©



Managing Questions

- Strategic
- Can Make or Break a Presentation (Why?)
- Often
 - Not Considered in Advance
 - Not Managed

Managing Questions

- Anticipate Questions &/Or Comments
 - Solicit From Reviewers/Practice Audience
 - Particularly Hard and/or Dreaded Ones
 - Formulate Answers In Advance
- Audience May...
 - Be Confused
 - Be Hostile
 - Disagree
 - Want More Details
 - Make Good Observation
 - Etc.
- Be Prepared

The Capstone Experience



[1 of 3]

- Anticipate Questions &/Or Comments
- Formulate Answers In Advance
- Create "Extra" Slides
- Place Past All Black "End" Slide
- Use
 - PowerPoint <u>Hyperlinks</u>
 - Use "Secret" Hidden Box (Upper Right) with Link

[2 of 3]

- Say During Introduction When Okay to Ask
 - During?
 - Preferably at End?
 - But Only if You're In Position to Do So
- What if you don't understand the question?
 - Because
 - Didn't Hear
 - Couldn't Parse Accent
 - Don't Understand the Question
 - Politely Ask Questioner to Repeat



[3 of 3]

- Good to Repeat Question
 - Others Hear It
 - Gives Speaker Chance to Think
 - May Need to Summarize Question
 - "The question is..."
- Good to Say
 - "That's a great question."
 - "That's a great idea."
 - Etc...
- Okay to Say...
 - "I'm sorry I didn't quite hear that. Can you repeat it?"
 - "I'll get to that later in the presentation."
 - "I'm sorry. I'm not sure what you're asking."
 - "Why don't we talk off-line later."
 - Etc...



Managing Time

- Practice Timing
- Be Aware
 - When and Where You Are
 - Adjust Dynamically
- Don't Look Directly At Time
 - Clock or Watch
 - Put a Clock/Timer Somewhere
- Never Have to Ask
 - "What time is it?"
 - "How much time do I have left?"



Managing the (Big) Screen

Do Not...

- Stand (Permanently) Behind Podium
- Stand (Permanently) in Front of Screen
- Read From Screen
- Turn Your Back to Audience
- Point Up at Screen Overhead
- Point at Laptop
- Whip Around Laser Pointer

Managing Your Slides

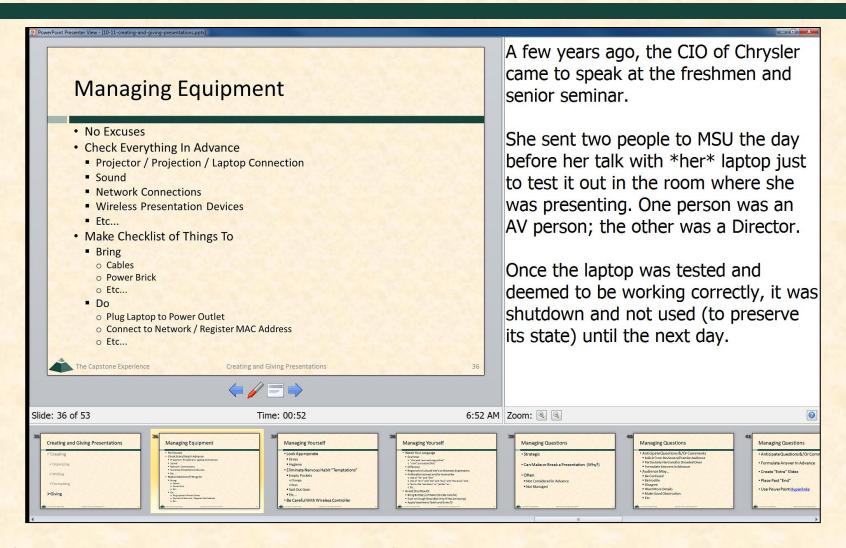
- Slides
 - Merely Aid To Presentation
 - Not a Transcript
- Glance at Big Screen or Laptop Screen
- Talk "About" Slide
- Three "Don't"s
 - Don't Read Slides to Audience
 - Don't Recite Slides to Audience
 - Don't Ask Audience to Read Slides
- Better Miss a Point Than Bore an Audience
- Use PowerPoint Presenter View

Use PowerPoint Presenter View

- Presentation on Projector
- Presentation View on Laptop
 - Current Slide
 - Notes (Zoomable)
 - Slide # of #
 - Timer
 - Clock
 - Drawing Tools
- But Don't Use as a "Crutch"



PowerPoint Presenter View



Managing Your Audience

- Don't Hand Out Slides In Advance
- Look at Audience
 - Don't Stare At...
 - Ceiling
 - o Floor
 - Screen
 - If Necessary, Look at Back Wall
- "Read" Your Audience
 - Faces
 - Body Language
- Solicit Questions/Reactions



Practice

- With An Audience
 - Yourself (Videotape)
 - Critical Friends
- As Close to Actual As Possible
 - Equipment
 - Room
 - Clothing
 - Lighting
 - Timing
 - Time of Day (For Lighting)
 - Audience
 - Questions

The Capstone Experience

Etc...



Creating and Giving Presentations

- √ Creating
 - ✓ Organizing
 - ✓ Writing
 - √ Formatting
- **√** Giving

Comments?
Questions?

Suggestions?

Hyperlinks in PowerPoint

- Can Link to
 - Existing File or Web Page
 - Place In This Document
- Inserting a Hyperlink
 - Highlight Text
 - Right Mouse Click
 - Select "Hyperlink..."
- Returning
 - Automatically From Existing File or Web Page
 - Via Another Hyperlink From Place In This Document





Design Day Booklet Instructions

The Capstone Experience

Dr. Wayne Dyksen

Department of Computer Science and Engineering
Michigan State University

Fall 2019



Project Description 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

he Capstone Experience

Use Microsoft Windows Version of Word



Team's Job

- READ Instructions Carefully
- Check Everything
- MUST Use Microsoft Windows Version of Word
- READ Instructions Carefully
- Write Project Description
- READ Instructions Carefully
- Provide Artwork
- READ Instructions Carefully
- Check Everything 100 Times
- READ Instructions Carefully



Project Description

- READ Instructions Carefully
- Newspaper / Magazine Style
- Target General Public
- Do NOT Start "Our Project is..."
- Use present tense throughout.
- Write as though your project is complete.
- Fill the entire textbox.
- Technical Jargon
 - At End
 - At Least Two Lines
 - At Most Three Lines
- See Examples
 - The Capstone Experience Booklet
 - Previous Design Day Booklets (<u>Design Day > Booklet</u>)
 - MSU Men's Basketball



Artwork

- READ Instructions Carefully
- Screenshot(s) of Working Software
- Fill up the entire whitespace.
- Can Overlap
- Include "Framing"
 - Browser
 - iPhone, iPad
 - Android Phone or Tablet
 - NOT Laptop or Desktop
- Add Border
 - If Blends Into White Background
 - Create Single PNG Using PowerPoint
 - Read Instructions
- Very High Resolution
- Preserve Aspect Ratios
- Crop to Eliminate Transparent "Borders"
- Use paint.net
- See Examples
 - The Capstone Experience Booklets
 - 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

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.

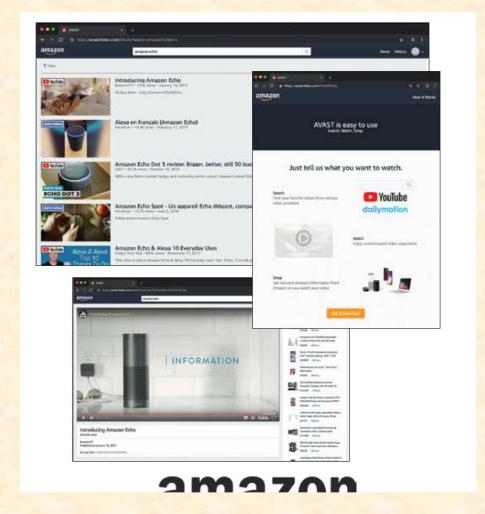






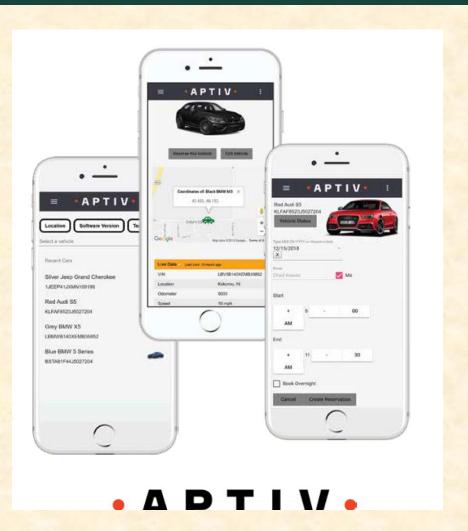


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CSE 498 / 7:56 a.m. Engineering Building, Room 3405 | Third Floor

Auto-Owners Insurance Jeffrey: Virtual Insurance Claim Advisor

uto-Owners Insurance is a Fortune 500 company that provides automotive, home, life and commercial 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

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

submits it to Auto-Owners.

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





LIFE . HOME . CAR . BUSINESS



Michigan State University

Alex Klingel Connor Stabnick

Nabiha Biviii

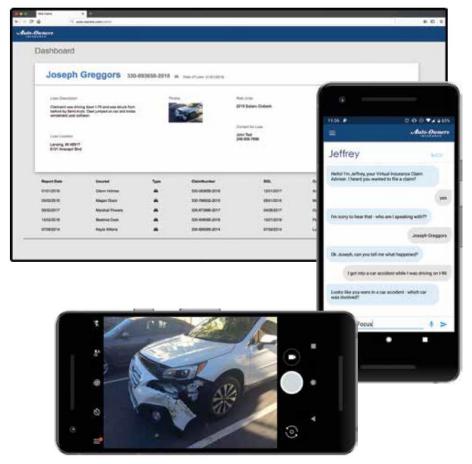
Scott Lake

Michael Dickmann



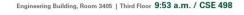
Jim Schumacher

Auto-Owners Project Sponsors



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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, ramonware 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

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 vasive malware to block its ability to detect the sandbax 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 available. 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.

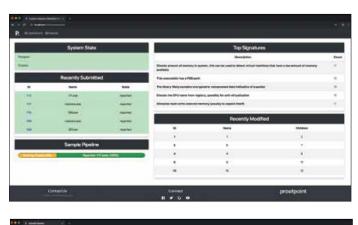
Our Improved Detonation of Evasive Malware system is implemented in Python, using the Cuckoo sandboxing framework and Suricata network monitor. Our web app is implemented using Python and Flask with the interface framed in Bootstrap and (Query.



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-	-	Service.	Name and Address of the Owner, Address of the Owner, and the Owner				
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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 320,000 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 abour recent transactions. Members can request other information abour 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.



Building Dreams Together





1 Template From Dr. D. To Team

N.B. The format of the template has changed.

Dow Chemical Company

Assist IT: Mobile IT Help Assistant

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

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- To insert your artwork, right mouse click on this artwork and select "Change Picture..."
- · Put each piece of artwork in a separate textbox.
- Do not change the textbox's black external border and white internal border. Think of them as handles. The black borders can overlap anything in your layout since the black borders will be deleted before your template is submitted to our graphic designer.
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Michigan State University

Team Members (left to right)

Brandon Brooks

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Cassie Thompson Kalamazoo, Michigan

Charlie Benson Lansing, Michigan Dow Project Sponsors

Kyle Alexander Midland, Michigan

Marc Habermann Midland, Michigan

Fareed Mohammed Midland, Michigan

Matt Olmsted Midland, Michigan

Page N + 5



Draft
From Team
To Dr. D.

1st Draft

Dow Chemical Company

Assist IT: Mobile IT Help Assistant

Around for over 110 years, Dow Chemical Company is a company focused on innovation and providing solutions. This focus on innovation leads Dow to the commitment of improving products and methods as well as breaking the mold for years on end.

Dow consists of over 70,000 employees worldwide with approximately 30,000 of these employees being contractors. With almost half of their employees being contractors, a lot of the employees do not have the knowledge to know where to look for help with their IT problems. Dow wished to come up with a solution that is a one-stop-shop that would allow for their employees to easily access or find the IT information that they need to continue working.

Dow IT Assistant is a web based chatbot that brings all of the IT knowledge to one place in an intuitive way. The chatbot greets the user upon visiting the page and sees if it can assist you with your IT problems or needs. The IT assistant can be used either via a desktop or mobile web browser. For Dow employees whom have visual impairment, they are able to take full advantage of the chatbot by vocalizing to it about their problem and having it respond over the voice service.

Dow IT Assistant uses Microsoft Azure Services including LUIS, QnA Maker, Voice Services, and knowledge bases. The chatbot learns the service request information from interfacing with Dow's large IT database. Hosted on Azure, the web application uses Microsoft .Net and Node.js.







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Page N + 5



3
Draft
From Writer
To Team

Writers' Edits

Dow Chemical Company Assist IT: Mobile IT Help Assistant

With over a century of experience, Dow Chemical Company is changing the world through innovation by providing advancements like more drinkable water, more clean and affordable energy, and increasing food production.

Dow employs over 70,000 people worldwide, including some 30,000 of which are contractors. For many of them, information technology (IT) is central to their work. Providing IT support is crucial, but to do so for so many people in so many locations is a challenge.

Our Assist IT Mobile IT Help Assistant is a chatbot that brings all of Dow's IT knowledge to one place, providing a one-stop shop for resolving IT issues.

Our chatbot leverages natural language processing to engage with a Dow employee in a natural and intuitive way, handling both text and voice input.

When a user describes their IT problem, Assist IT either provides a solution by searching Dow's vast knowledge base of issues and solutions or it asks the user for more information.

Assist Π is a responsive web app so it can be used with any web browser on a desktop or on any mobile device. And, since it's web-based, it provides Π support at any time, from anywhere.

Our Assist IT Mobile IT Help Assistant uses a variety of Microsoft Azure Cloud Services including LUIS, QnA Maker and Voice Services. Our chatbot leverages Dow's extensive IT knowledgebase of issues and solutions. Hosted on Azure, Assist IT is implanted using Microsoft .Net and Node.js.





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Dow

Page N + 5



4
Template
From Team
To Dr. D.

Team's 2nd Draft

Changes
Highlighted in
Yellow

Dow Chemical Company IT Assistant

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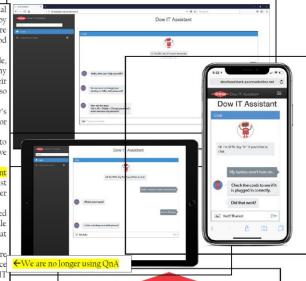
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Page N + 5



Final Draft From Dr. D. To Designer

Dow Chemical Company IT Assistant

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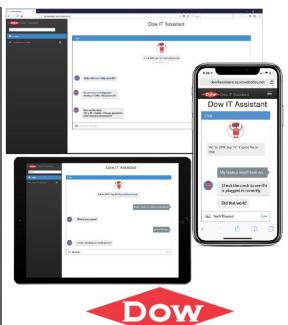
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Michigan State University



Page N + 5



Design Day Booklet Page

Dow Chemical Company IT Assistant

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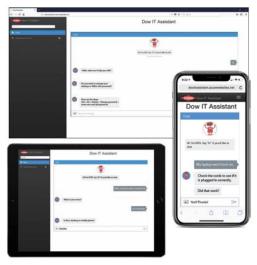
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PAGE 29



Design Day Writing Schedule

Step	Weekday	Date	Task	Elapsed Day
1	Monday	September 30	Dr. D. sends templates to teams.	
2	Sunday	October 6	Dr. D. receives first draft from teams by 11:59 p.m.	6
3	Monday	October 7	Dr. D. sends first draft by teams to TAs.	1
4	Monday	October 7	Dr. D. reviews artwork and sends artwork feedback to teams.	0
5	Monday	October 7	We review artwork during our all-hands meeting.	0
6	Tuesday	October 8	Dr. D. recieves updated artwork from teams by 11:59 p.m.	1
7	Tuesday	October 8	Dr.D. receive drafts from TAs by 11:59 p.m.	0
8	Wednesday	October 9	Dr.D. sends TAs' drafts to writer at 8:00 a.m.	1
9	Wednesday	October 9	We review drafts during our all-hands meeting.	0
10	Friday	October 11	Dr. D. receives draft from our writer by 8:00 a.m.	2
11	Friday	October 11	Dr. D. sends writer's drafts to TAs.	0
12	Sunday	October 13	Dr. D. receives TAs' drafts by 11:59 p.m.	2
13	Monday	October 14	Dr. D. sends drafts to teams.	1
14	Monday	October 14	We review drafts during our all-hands meeting.	0
15	Tuesday	October 15	Dr. D. recives final drafts from teams by 11:59 p.m.	1
16	Wednesday	October 16	We review final drafts during our all-hands meeting.	1
17	Thursday	October 17	TAs review final drafts.	1
18	Friday	October 18	Dr. D. submits assets to our graphic designer.	1

Submission

- READ Instructions Carefully
- 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)
 - o team-urban-science-artwork-2.png (Very High Resolution)
 - o team-urban-science-artwork-3.png (Very High Resolution)
 - Zipped
- Email
 - Subject: Team Urban Science Design Day Booklet Project Page
 - Body
 - Not Blank
 - Something Professional
 - Attachment
 - Zipped Assets Folder
 - team-urban-science-design-day-booklet-page.zip
 - Due 11:59 p.m., Sunday, October 6.



[1 of 2]

All-Hands Meetings

- 10/07: Design Day and the Design Day Booklet
- 10/09: Team Status Report Presentations
- 10/14: Team Alpha Presentations
- 10/16: Team Alpha Presentations
- 10/21: Team Alpha Presentations
- 11/18: Team Beta Presentations
- 11/28: Thanksgiving
- 12/02: Project Videos
- 12/06: Design Day



[2 of 2]

Design Day Booklet Page

- 10/06: Teams submit project page assets.
- 10/07: We review artwork in all-hands meeting.
- 10/08: Teams submit updated artwork.
- 10/09: We review drafts in all-hands meeting.
- 10/14: Dr. D. sends drafts to teams.
- 10/15: Teams submit updated project page assets.
- 10/16: We review final drafts in all-hands meeting.