MICHIGAN STATE UNIVERSITY

02/17:

Creating and Giving Presentations

The Capstone Experience

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Department of Computer Science and Engineering Michigan State University

Spring 2016



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.

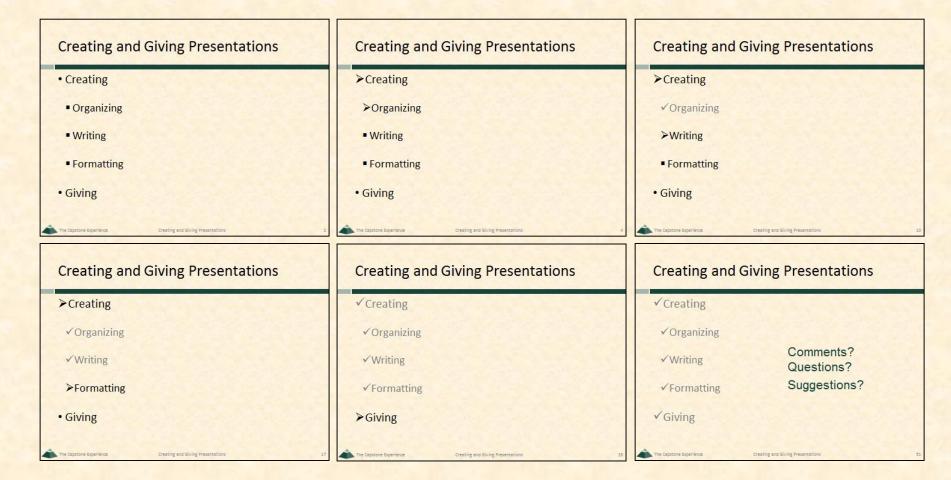
What do you want it to be?

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 Away"s
- 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...



11

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

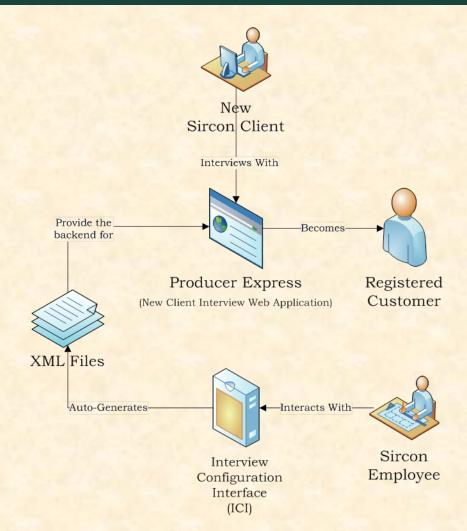


"Pictures"

- 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
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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



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 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
- 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



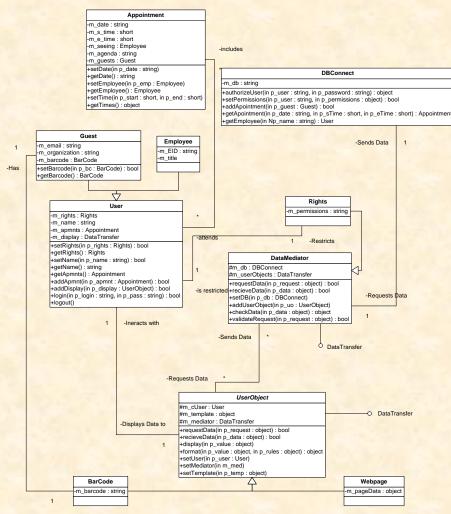
Directions to Spartan Stadium

- 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.)
- Test
 - In Advance
 - For Actual Usage (Projecting, Printing, Etc...)
 - In Actual Setting
 - o Room
 - Equipment
 - 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.

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..."

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



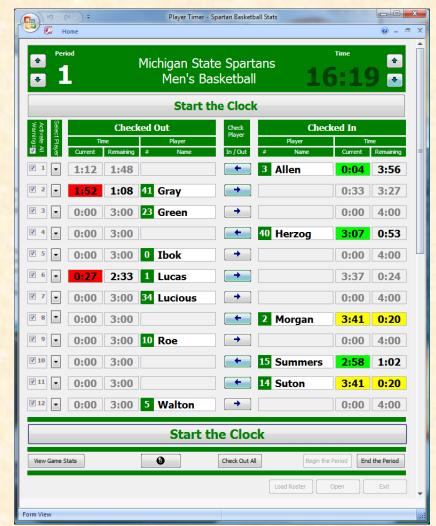
Use Color and Grey to Highlight

- 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



Player Timer App Features

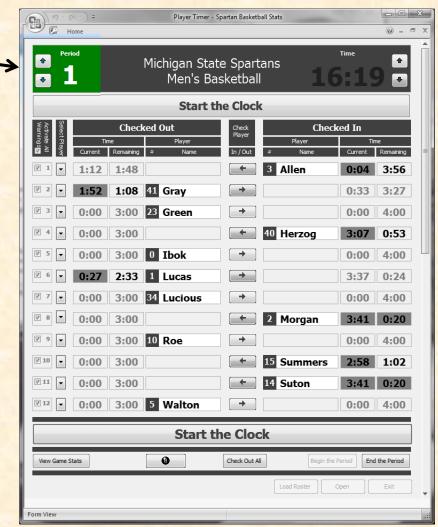
- Set Period
- Check In/Out Players
- Start/Stop Clock
- Adjust Clock



Player Timer App Features

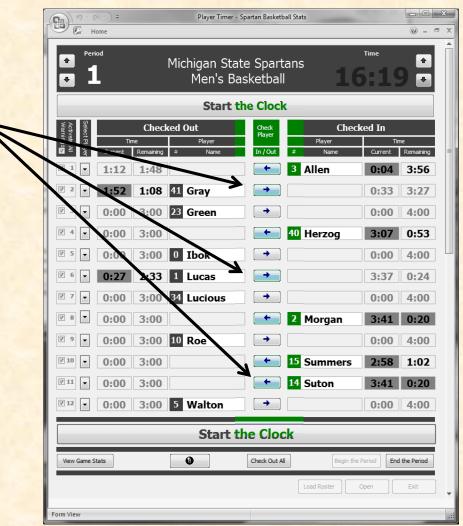
- Set Period
- Check In/Out Players
- Start/Stop Clock
- Adjust Clock

The Capstone Experience



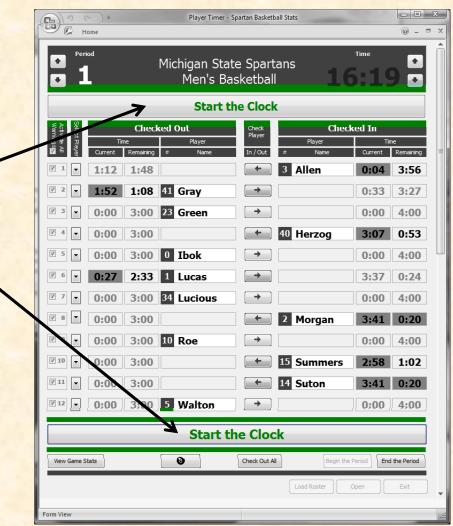
Player Timer App Features

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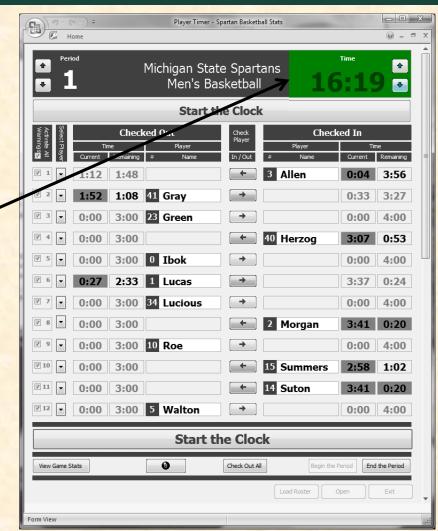
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Player Timer App Features

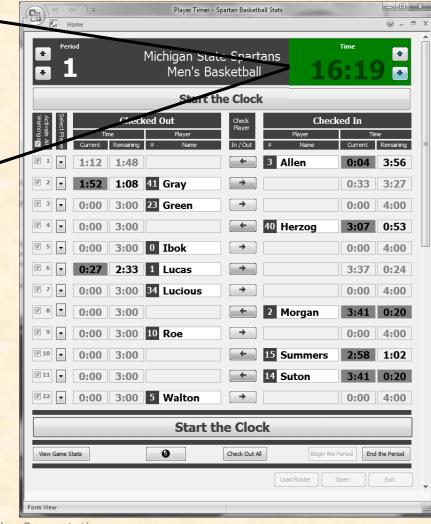
- Set Period
- Check In/Out Players
- Start/Stop Clock
- Adjust Clock -



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 "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", "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 ©



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

- 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.



- 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

- 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
 - o Didn't Hear
 - Couldn't Parse Accent
 - Don't Understand the Question
 - Politely Ask Questioner to Repeat

- Good to Repeat Question
 - Others Hear It
 - Gives Speaker Chance to Think
- 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

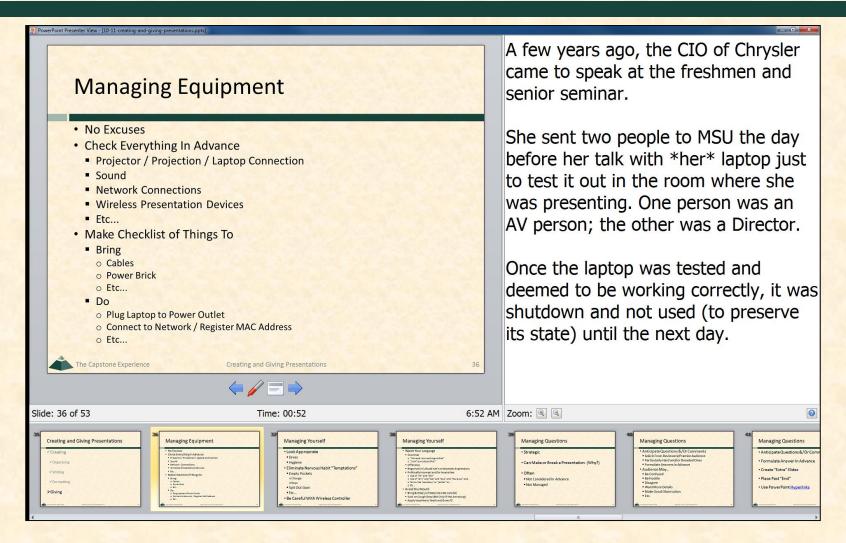
- Slides
 - Merely Aid To Presentation
 - Not a Transcript
- Glance at Big Screen or Laptop Screen
- Talk "About" Slide
- Three "Don't"s
 - Don't Read Slides to Audience
 - Don't Recite Slides to Audience
 - Don't Ask Audience to Read Slides
- Better Miss a Point Than Bore an Audience
- Use PowerPoint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



The Capstone Experience

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



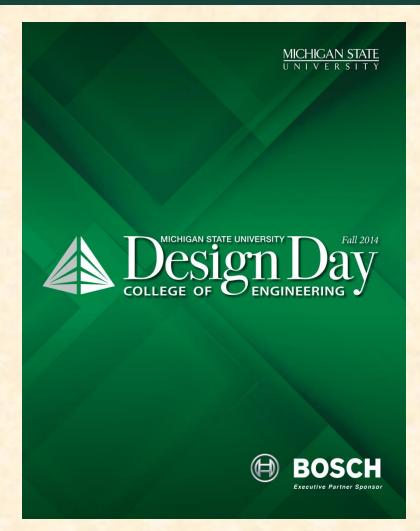
What's ahead?

- All-Hands Meetings
 - **■** M, 02/15: Resume Writing and Interviewing
 - **■** W, 02/17: Creating and Giving Presentations
 - M, 02/22: Team Alpha Presentations
 - W, 02/24: Team Alpha Presentations
 - M, 02/29: Team Alpha Presentations
 - W, 03/02: Team Alpha Presentations
- Alpha Presentations
 - Slide Decks
 - Template on Downloads Page
 - o Due by 4:00 a.m. Monday, February 22
 - Conflicts
 - Only for Documentable/Non-Movable Interview
 - Send Email to Dr. D. Immediately
- Design Day Booklet Content
 - Templates and instructions are posted online.
 - First draft is due 4:00 a.m., Friday, February 26.
 - Project Description
- O Artwork
 The Capstone Experience



Design Day Booklet

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



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



Template From Dr. D. To Team

Meijer Mobile Location-Based Product Promotion

Insert your project description here. Target your writing for the general public. Begin with the motivation for your project. Do not begin with phrases like "Our project was to make..." or "For our project we made...". See the example that Dr. D. wrote for Spartan Basketball Player Timer.

Use a "newspaper" style of writing. Sentences and paragraphs should tend to be short and snappy. It's even okay to have a paragraph with only one sentence, just not too many of them. Write everything in the present tense.

If space permits, you can reference your artwork at the right.

Use 11-point, Times New Roman font. Use single space lines. Justify both margins. Use 6 pts of space between paragraphs; do not use blank lines between paragraphs. Use one space between sentences within a paragraph.

The size of this textbox is 4.1" (wide) by 5.25" (high). Do not change the size of the textbox. Your text must fit exactly within this textbox with these dimensions. This means that your text should fill the entire textbox but no more.

The last line of each paragraph should be at least one-half to three-quarters of the width of the textbox. Do not end a paragraph with a line containing one or two words.

After you have a draft, make the template available to your clients. Get feedback from them before you sub.

The last two lines or so should include technical information about your project. See <u>previous Design Day booklets</u> and <u>Spartan Basketball Player Timer</u> for examples.

Insert at least one piece of artwork here.

Artwork should be a screen shot or screen shots of your

software.

Artwork must be large enough to be viewable.

If artwork is a web app, include a browser frame.

If artwork is a mobile app, include mobile device frame.

If artwork is a native app, include native window frame.

Artwork must fit in this textbox.

This textbox is 3.75" wide.

You should fill this space as much as possible.

You may increase the height of the textbox if there is sufficient space above your corporate logo (below) without having to shrink the size of your corporate logo.





Team Members (left to right)
Dan Leclerc
Livonia, Michigan
Jason Bull
Rochester Hills, Michigan
Xavier Durand-Hollis
East Lansing, Michigan
Kevin Pauly
Lansing, Michigan

Michigan State University

Project Sponsors
Jim Becher
Grand Rapids, Michigan
Chris Laske
Grand Rapids, Michigan
Jim Poll
Grand Rapids, Michigan
Murali Rajagopalan
Grand Rapids, Michigan
Dave Rodgers
Grand Rapids, Michigan

Meijer

The Capstone Experience

Page N + 7

Team's Job

- READ Instructions Carefully
- Check Everything
- MUST Use 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.
- At Most Two or Three Lines of Technical Jargon
- See Examples

he Capstone Experience

- The Capstone Experience Booklets
- 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
- 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



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)
 - team-urban-science-artwork-2.png (Very High Resolution)
 - o team-urban-science-artwork-N.png (Very High Resolution)
- Email
 - Subject: Team Urban Science Design Day Booklet Project Page
 - Body
 - Not Blank
 - Something Professional
 - Attachment

The Capstone Experience

- Zipped Assets Folder
- team-urban-science-design-day-booklet-page.zip
- Due 4:00 a.m., Friday, February 26.



Template From Team To Dr. D.

Meijer Mobile Location-Based Product Promotion

Founded in 1934, Meijer serves the Midwest as one of the largest supermarket chains in the United States. Meijer has been known for innovation ever since they created the first modern supercenter in 1962. Continuing on this journey of innovation, Meijer is utilizing their mobile application to revolutionize today's shopping experience.

One area that Meijer hopes to enhance is the way product promotions are presented to customers.

We have created an iOS application that shows product promotions based on a customer's location in any Meijer store as well as an administrative interface for analytics.

Our iOS application communicates with strategically placed iBeacons in a physical Meijer store through Bluetooth Smart. When a customer walks within range of an iBeacon, a notification will appear on their phone showing all nearby product promotions and sales.

The administrator interface allows employees to create, edit, and delete iBeacon product promotions. Customer analytics are presented in this interface and show how effective each beacon is. This valuable data can be leveraged by Meijer and their partners to track the connection between promotions and purchase decisions. This project also paves the way for other location-based customer services at Meijer.

Our iOS application is written in C# while our administrator interface is built with HTML, CSS, and AngularJS. Microsoft Azure hosts the administrator website and database which uses SOL Server 2012.







Michigan State University

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Grand Rapids, Michigan
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Meijer

Page N + 7



3 Template From Dr. D. To Team

Meijer Mobile Location-Based Product Promotion

With over 200 stores, Meijer serves the Midwest as one of the largest supermarket chains in the country. Having created the first modern supercenter in 1963, Meijer is known for customer service and continual innovation.

Meijer is revolutionizing today's shopping experience in many ways including the way that product promotions are delivered to its customers.

Our Mobile Location-Based Product Promotion system features an iPhone app that shows product promotions based on a customer's location within any Meijer store. For example, when walking down the cereal aisle, a customer may be alerted that their favorite cereal is on sale.

Our iPhone app determines a customer's location in a store using strategically placed devices called iBeacons, which communicate with iPhones using Bluetooth. When a customer walks within range of an iBeacon, a notification appears on their phone showing all nearby product promotions and sales.

In addition to our iPhone app, our system includes a web app with which Meijer associates create, edit and delete iBeacon product promotions and sales.

Our web app also displays customer analytics enabling Meijer and its partners to evaluate the impact of location-based promotions on buying decisions.

Our iPhone app is written in C# while our administrator interface is built with HTML, CSS and AngularJS. Microsoft Azure hosts the administrator website and database which uses SQL Server 2012.







Michigan State University

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Grand Rapids, Michigan
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Grand Rapids, Michigan
Murali Rajagopalan
Grand Rapids, Michigan
Dave Rodgers
Grand Rapids, Michigan

Meijer

Project Sponsors



4 Template From Team To Dr. D.

Meijer Mobile Location-Based Product Promotion

With over 200 stores, Meijer serves the Midwest as one of the largest supermarket chains in the country. Having created the first modern supercenter in 1963, Meijer is known for customer service and continual innovation.

Meijer is revolutionizing today's shopping experience in many ways including the way that product promotions are delivered to its customers.

Our Mobile Location-Based Product Promotion system features an iPhone app that shows product promotions based on a customer's location within any Meijer store. For example, when walking down the cereal aisle, a customer may be alerted that their favorite cereal is on sale.

Our iPhone app determines a customer's location in a store using strategically placed devices called iBeacons, which communicate with iPhones using Bluetooth. When a customer walks within range of an iBeacon, a notification appears on their phone showing all nearby product promotions and sales.

In addition to our iPhone app, our system includes a web app with which Meijer team members create, edit and delete iBeacon product promotions and sales.

Our web app also displays customer analytics enabling Meijer and its vendor partners to evaluate the impact of location-based promotions on buying decisions.

Our iPhone app is written in C# while our administrator interface is built with HTML, CSS and AngularJS. Microsoft Azure hosts the administrator website and database which uses SQL Server 2012.







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Meijer



5 Template From Dr. D. To Designer

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Meijer



Page N+7

Design Day Booklet Page

9:10 a.m. Engineering Building, Room 3405 | Third Floor CSE 498

Meijer

Mobile Location-Based Product Promotion

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