

**MICHIGAN STATE**  

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**U N I V E R S I T Y**

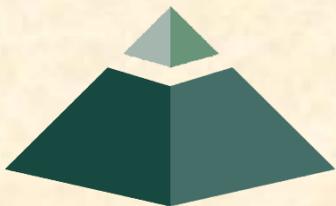
# Design Day Booklet Instructions

## The Capstone Experience

Dr. Wayne Dyksen

Department of Computer Science and Engineering  
Michigan State University

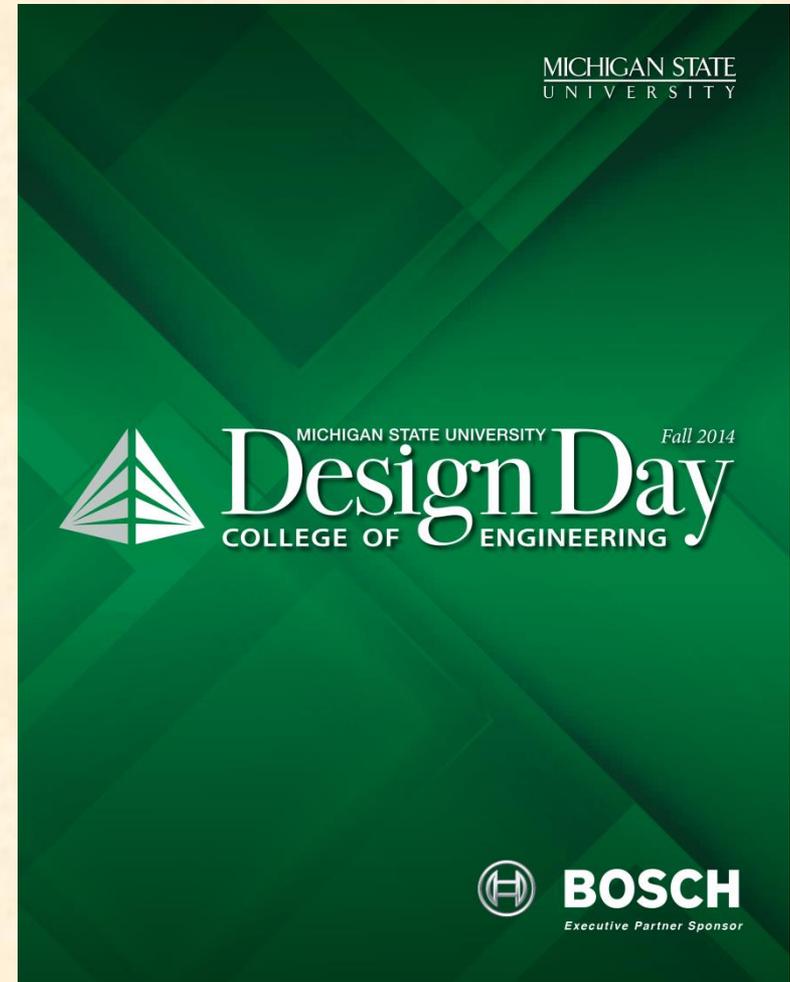
Fall 2017



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

# 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 [Downloads](#) Page
- Template Completed by Team
  - Project Description
  - Artwork
  - Use Microsoft Windows Word



# 1 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 [previous Design Day booklets](#) and [Spartan Basketball Player Timer](#) 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.

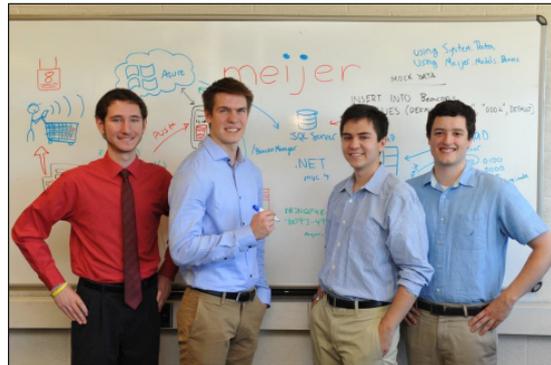
If artwork is a native app, include native window frame.

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.



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

- Dan Leclerc  
Livonia, Michigan
- Jason Bull  
Rochester Hills, Michigan
- Xavier Durand-Hollis  
East Lansing, Michigan
- Kevin Pauly  
Lansing, Michigan

### Meijer

#### 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

# Team's Job

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- 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
  - The Capstone Experience Booklets
  - Previous Design Day Booklets ([Design Day > Booklet](#))
  - [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
- 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 ([Design Day > Booklet](#))
  - [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)
    - 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
    - Zipped Assets Folder
    - team-urban-science-design-day-booklet-page.zip
- Due 4:00 a.m., Friday, October 13. (Think Thursday night.)



## 2 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 SQL Server 2012.




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Grand Rapids, Michigan



# 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.

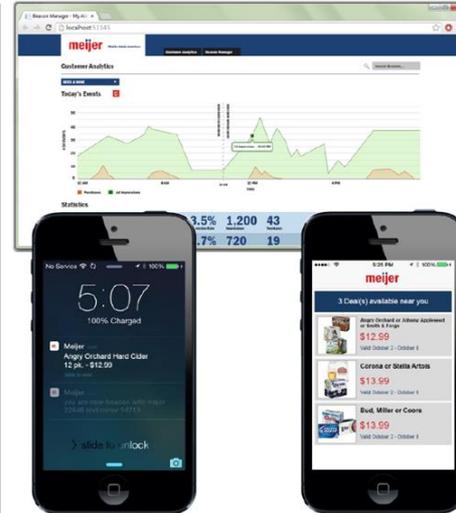
Our Mobile Location-Based Product Promotion system features an iPhone app that shows product promotions based on a customer's location within any Meijer store. For example, when walking down the cereal aisle, a customer may be alerted that their favorite cereal is on sale.

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.



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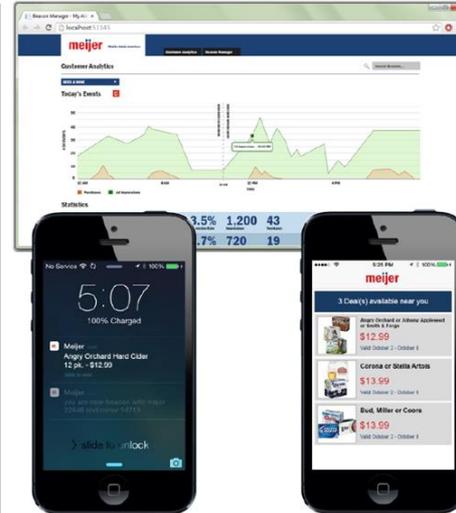
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In addition to our iPhone app, our system includes a web app with which Meijer **team members** create, edit and delete iBeacon product promotions and sales.

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# 5 Template From Dr. D. To Designer

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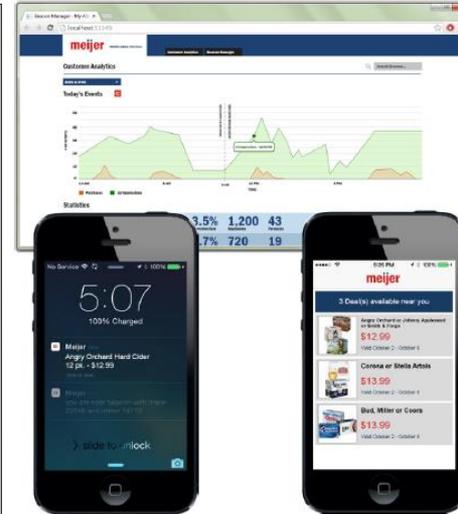
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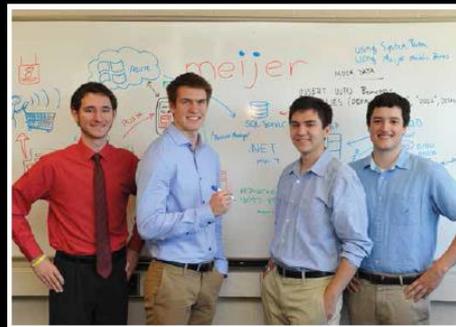
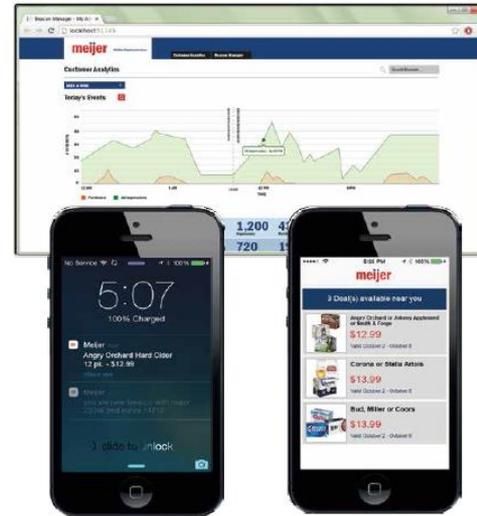
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