MICHIGAN STATE UNIVERSITY Project Plan Employee Discount Mobile App The Capstone Experience

T O I I I

Team Spectrum Health Marco Botros Emily Van Norman Josh Pelcher Aries Xue Ruchira Ramani

Department of Computer Science and Engineering Michigan State University

Fall 2014



From Students... ...to Professionals

Project Overview

- Create a mobile web app for Spectrum Health Employee's to see discounts available for them.
- Able to work with tablets and phones through responsive design.
- Follow Spectrum Health's UI/UX guidelines to provide a consistent and healthy user experience

Functional Specifications

- Be able to categorize discounts (i.e. Pets, Salon & Spa, Automotive etc...)
- Be able to search discounts either by category or all discounts available
- Be able to see discounts within a certain radius of the device's location
- Be able to 'favorite' discounts and access all 'favorited' discounts from application landing page.
- Be able to share discounts on social media sites such as Facebook and Twitter.

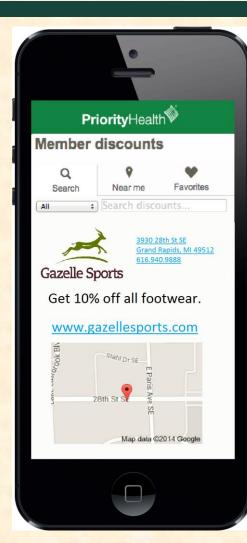
Design Specifications

- Each page has a unified control panel to navigate the application.
- The landing page contains a list of the discounts which can be sorted via category and searched via name or location.
- The discount page provides the user with more details about the discount and company.
- The color pallet and UX/UI specifications follow Spectrum Health's guidelines.

The Capstone Experience

Screen Mockup: Landing and Discount Page

	-		
	orityHealth	\$	
Member of	discounts		2.0
Q Search	Rear me	Favorites	
All :	10%		
new balan	\$20 c	off >	
Dunhan	s 10% non-sale	off >	
Curve	66% (joining fee	off ->	

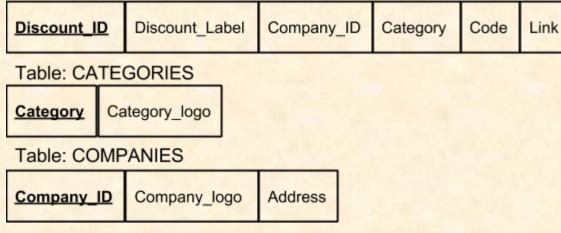


The Capstone Experience

Technical Specifications

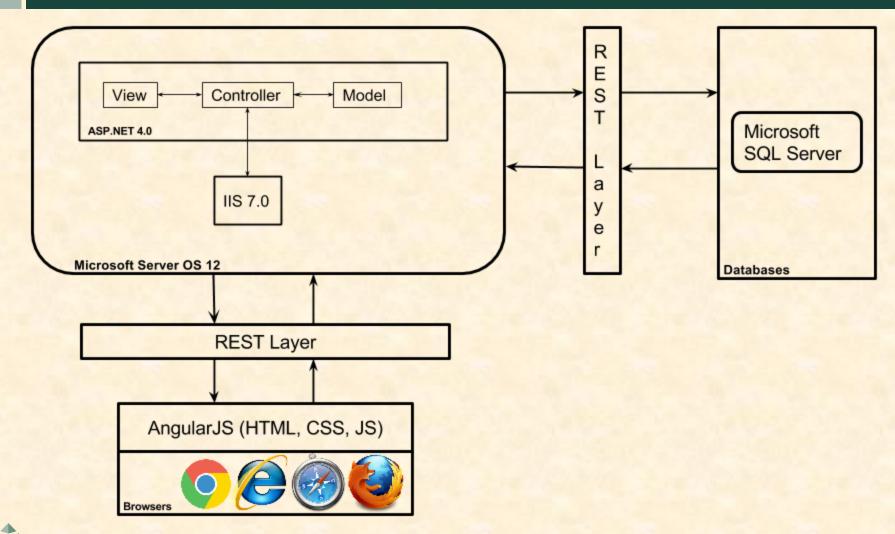
- Microsoft Visual Studio Professional 2013
- Netbeans IDE
- Github private repository
- Database Schema:

Table: DISCOUNTS





System Architecture



System Components

- Hardware Platforms
 - Dell rack mounted server
 - 2 iMacs
 - Android, iPhone, Nexus
- Software Platforms / Technologies
 - AngularJS
 - ASP.net MVC
 - Microsoft Internet Information Services (IIS) 7.0
 - Javascript
 - CSS, HTML5
 - REST Web Service Layer

Testing

- Microsoft Unit Testing Framework
- Manual testing on team members devices
- Field Testing of location based features will be required



Risks

- Multiple REST layers
 - Research on JSON REST to get a firm understanding of how it all works
- How to use Windows IIS web servers
 - The client informed us we will be using IIS servers for development, which no member on our team has used before
 - Research on IIS 7.0 to get a firm understanding
- Code might not comply with companies security
 - Send our client our code periodically for them to test against their system