# MICHIGAN STATE UNIVERSITY Project Plan Healthier Communities Time Banking The Capstone Experience

#### Team Spectrum Health

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From Students... ...to Professionals

## **Functional Specifications**

- Connect the Homebound Patients with the available volunteers
- Patients can request services that they need by spend "time points" in their "Time bank"
- Patients can also provide their skills to help others and earn "time points"
- Help Homebound Patients to find their own values.

## **Design Specifications**

- Responsive web app
- Concepts from Google's material design guidelines
- Intuitive user experience aimed towards potential non-technical users

## Screen Mockup: User Login Page

	A little bit about you		
	First Name Last Name		
	Email Address		
	Birthday		
Welcome to Spectrum Health's Time Banking System Username	Gender Eamela		
[Corporate logo] Password Not a user? Sign up today!	Male Female Describe yourself in a few sentences		
	Do you have any skills? Check all that apply.           Yardwork         Animal Care         Housework		
	Conversation Etc		
	Biography		
	Cancel Submit		

Team Spectrum Health Project Plan

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## Screen Mockup: Profile Page

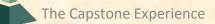
00	
Title/Logo	Logout
[profile pic] [username] 2100 coins 12 badges	[profile pic] [full name] [profile pic] This is a short description of the user. One or two sentences
Home	Bio
Search	Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu
Conversations	fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
My Postings	Skills Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
	Badges
	Badge 1     Badge 2       This is a short description of the badge     This is a short description of the badge

## Screen Mockup: Home Page

Title	e/Logo			Logout	
[use 2100 coins	-		Need help? Enter a new posting below Title Description Select relevant categories		
н	lome		Yardwork Animal Care Housework		
Se	earch	_	Conversation Etc		
Conve	ersations	_	Save Never Mind		
My F	Postings		Postings         [title of posting]         [username]         Beginning of the description before it gets cut off         [title of posting]         [username]         Beginning of the description before it gets cut off         [title of posting]         [username]         Beginning of the description before it gets cut off         [title of posting]         [username]         Beginning of the description before it gets cut off		

## **Screen Mockup: Conversation Page**

Title/Logo	Logout	Title/Logo	Logout
[profile pic] [username] 2100 coins 12 badges Home Search Conversations My Postings	Conversations [recipient full name] This would be text from the last sent message [recipient full name] This would be text from the last sent message	[profile pic] [username] 2100 coins 12 badges Home Search Conversations My Postings	Back to Conversations         Conconcersation with [recipient name]         Image: Descent of the second sec

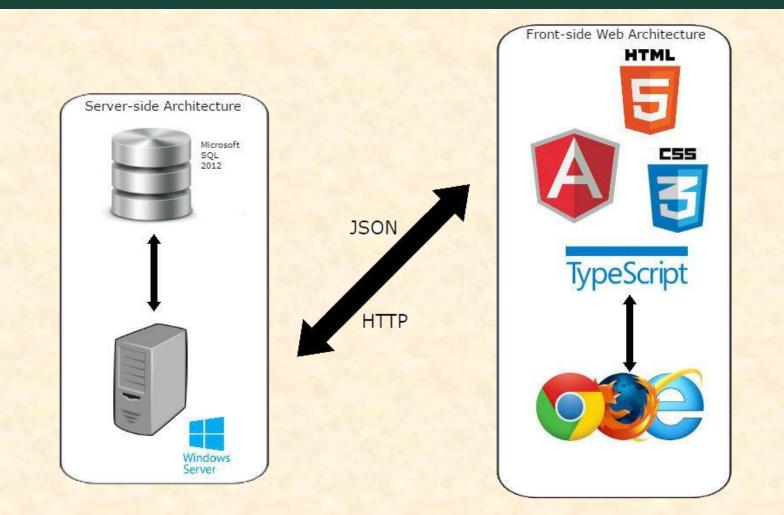


## **Technical Specifications**

#### Server Systems / Software

- Windows Server 2012 with Microsoft SQL 2012
- Main server framework works with .NET Core using C#
- Entity framework handles database operations
- Use of Angular 2 for front end development
- Development Systems / Software
  - Files are stored in private Github repositories
  - VS Code and Visual Studio Community 2015 is being used for code development and testing

## System Architecture



#### System Components

- Hardware Platforms
  - Windows environment and SQL database
- Software Platforms / Technologies
  - .NET Core
  - Angular 2
  - TypeScript
  - C#
  - HTML5 /CSS3

#### Testing

- Front-End testing tools
  - Karma
  - Jasmine
- Back-End testing tools
  - NUnit
- User tested by non-computer science friends

#### Risks

- Limited knowledge of Angular 2 and .NET Core technologies
  - No members of the team are familiar with these technologies
  - Read online documentation and, if needed, contact corporate resource
- Limited experience with creating responsive web apps
  - No members of the team have created responsive web apps
  - Google provides documentation for their progressive web app framework
- News Feed Filtering
  - Unsure of how to execute filtering of postings for news feed
  - Left more time on our timeline for this task, keep in good communication with client about this task