

UMKC / Commerce Project

2022 Fall Semester

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Project Summary

You will be creating a web application that allows users to login and setup their own fundraiser, track their donations, and view and donate to other user's fundraisers. While you must be able to track and make donations through your site, you are not processing real transactions. Please use fake/dummy card numbers when appropriate to simulate the process.

Requirements

Technical Requirements

- Must be a web application (not a desktop application) built in a "modern" web development framework.
 - .Net (C#) or Java preferably – if you choose another framework, support from us will be limited
 - You cannot use a CMS, such as WordPress
- Database should be in SQL server 2012 or above – if you choose another database option, support from us will be limited.
- 10% code coverage for unit tests is required.
 - xUnit is a good framework for .NET.

User Experience Requirements

- The application needs to be designed so that anyone, regardless of technical level, should be able to understand and use your website.
 - Text should be clearly visible across desktop and mobile views
 - This includes font sizes, proper background colors for fonts, font colors, contrast etc.
 - Use everyday language that users will be able to understand
 - Ex. Spelling out the date and time in a readable format instead of a timestamp
 - Text in tables need to be properly aligned for readability.
 - Numeric needs to be right aligned.
 - Alphanumeric needs to be left aligned.
 - Pay attention to use of negative (or "white") space in your design as well

Frontend Development Requirements

- Make the application mobile and web responsive and aesthetically pleasing.

- You must use at least one CSS framework
 - We recommend Bootstrap.
- Front-end framework/libraries are up to you but must be included in project (aka no external resources).

Required Pages

Login Page

- A login and password field
 - Mask the password field.
 - Password requirements:
 - 8 characters minimum
 - 1 upper case letter
 - 1 symbol
 - 1 number
 - Login Button

Homepage/Dashboard

- From this screen all fundraisers created by other users are displayed
 - Fundraisers can be clicked on and viewed with the ability to donate
- User can create new fundraiser

Individual Fundraiser Pages

- Fundraiser pages must include:
 - Fundraiser Title
 - Fundraiser Description
 - Fundraiser goal and how much has been raised so far
 - Use a graphic of some sort to display the progress
- A list of most recent donation amounts and the donor's name
- A donate button that leads to a donation form

Donation Form

- Form must include:
 - Name and billing address
 - Donation amount
 - The option to donate from a bank account or a credit/debit card

User Profile and Settings

- User can view and edit their active fundraisers
- User can update personal information and password

Stretch Goals (Two are required)

- Deploy the project into a windows server/cloud instance
 - Practice configuration properties for different environments
- Create a Web API layer for backend interactions.
- Use an open-source reporting tool/business intelligence suite for all the reporting and its data visualization
- Use pull requests/code review approved by a group member within your source control
- Security scan your application and fix Critical issues at a minimum.
 - OWASP ZAP is a good open-source option
- Do an Accessibility Audit of your application and fix errors
- Session for remembering user if they close their browser and then log in again
- Options for user if they forgot their username or password

Presentations and Check-Ins

Mid Semester Check-In

- This is your opportunity to meet one-on-one with our team to get early feedback on your progress
- You can show off whatever work you have done so far on the project (backend, frontend, design concepts, etc.)
- We will also offer you a chance at a Q&A for anything about the project, resumes, career fairs, interviews, etc.

Final Presentation

Treat this presentation like an overview to your stakeholders, we would like to see the following:

- A walkthrough of your working application
- General Presentation/Public Speaking skills
- Professional Attire

- If you ran a security or accessibility scan on the application, a report of what you fixed.
- Takeaways
 - Did you learn anything new?
 - Did you experience any setbacks? What did you do to overcome them?
 - Suggestions for future projects
- More details to come on this as we get closer.

Suggestions

- Ask questions when you don't understand something.
- Start early. Things that don't seem like they'll take long usually do.
- Split the work. One person shouldn't be doing everything.
- Use this opportunity to try something new rather than what you're comfortable with.
- Keep it simple. Less is more sometimes.
- Have fun!