*Youth Homelessness Project*

Technical Design Document

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**Document Changes**

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| --- | --- | --- | --- |
| **Revision I.D.** | **Date** | **Author** | **Summary** |
| 1 | 1/29/23 | Alisha | Tech Requirements |
| 2 | 1/29/23 | Brian | Tech Requirements |
| 3 | 1/29/23 | Yusuf | Tech Requirements |
| 4 | 1/29/23 | Jose | Tech Requirements |
| 5 | 1/29/23 | Francys | Tech Requirements |
| 6 | 1/29/23 | Anant | Tech Requirements |
| 7 | 2/2/23 | Yusuf | Vision Statement |
| 8 | 2/3/23 | Alisha | Implementation and Development update |
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**Abstract**

Continuing the Youth Homelessness Project where the previous team left off, our goal is concluding the project by completing the development, testing, and deployment. The objective for the Youth Homelessness Project is to create a Java web application that collects data through a voluntary survey hosted by the City of Orlando. The users of this survey are provided with resources for support based on their survey responses. All survey information is anonymous and provides updated real-time reports of instances of homelessness, food insecurity, and other information to the City of Orlando.

**Vision**

The Youth Homelessness Project’s goal is to provide a java web application for people specifically college age youths to access resources and information that are available to them to help them with their needs. The web app will provide users with a survey that will allow the resources to be sorted and presented to the user based on their individual needs. The survey will have the dual purpose of providing the city of Orlando with information on what resources are being accessed and what areas might need more resources and funding.

**Requirements**

* Users able to submit anonymous responses to the survey.
* Users are provided resource information based on survey responses.
* Analysis of survey responses are available to authorized roles.
* Questions can be updated, added, or adjusted to current resource information available to authorized roles.
* Administrative users can adjust account information for the application.

**Project at Current State**

The YHP currently is setup with a working web UI, survey questions and resource information uploaded into MySQL, login information and registration availability through MySQL, and configuration for AWS Quicksight and AWS Elastic Beanstalk. Current configuration for Elastic Beanstalk does not appear to communicate with established MySQL database. AWS Quicksight features are advised not to be fully implemented until just prior to release due to costs with using the service.

**Implementation**

* Java
* Spring Web
* Spring Data JPA
* Spring Security
* Apache Maven
* HTML/CSS
* JavaScript
* AWS

**Development**

Our group decided to migrate from AWS to Azure. Changes in the AWS education tier made development inflexible. Azure services that we will use are subject to change.

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| **Focus** | **Azure Service** | **Team Members** | **Description** |
| Migration of application to Azure | Static Web Apps | Alisha, Yusuf | Ensure that UI and software operates as intended |
| Database configuration | Azure Database Migration | Anant, Jose | Responsible for importing database to Azure or linking Azure database to MySQL |
| Application Analytics | Application Insights | Francys, Brian | Ensure application use is recorded to build analytic data, support with testing |

**Testing**

Test cases will be made to ensure survey results are providing resources that will be the most accessible to the user. Test cases will include those for improper entry in input forms.

**Communications Plan**

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| **Project Name:** Youth Homelessness Project  **Team Leader:** Alisha Hannan  **Team:** Brian Banfield, Yusuf Kounnichi, Anant Bisht, Francys Guevara, Jose Rosado | | **Begin Date:** Jan 09, 2023  **End Date:** Apr 30, 2023 | |
| **Project Objectives:**   * + Gather Requirements.   + Align on application design.   + Migrate application to Azure.   + Develop /refine features.   + Testing   + Revision   + Deployment | | | |
| **Stakeholders:** *Dr. Lisa Macon, Alisha, Brian, Yusuf, Anant, Francys, and Jose* | | | |
| **Communication Tool** | **Date** | **Team ID** | **Length** |
| Slack | 1/29/23 | 1, 2, 3 | 2 hr. |
| Slack | 2/2/23 | 1, 3, 5, 6 | 15 min. |
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