

Youth Homelessness Project

Fall 2022



<https://github.com/bellindtonCayo/YouthHomelessnessProject>

(Start your repository by cloning or forking Fall 2022 YHP to maintain a better chain of custody of the project and benefit from all fork features. Note: The fall 2022 repository was forked from summer 2022 and has everything from summer 2022. However, if you cloned or forked from the summer 2022 YHP team, take the best action based on your needs and requirements.)

**Introduction**

The fall 2022 team picked up from where the Summer 2022 project team left off. The project goal is to provide housing, dependent, and food resource information for students in the Orlando area. The web app is meant to help students find the proper resources through surveys. The app offers available resources based on the questions answered on the survey and answers provided by the student.

**Summer 2022**

The summer team used Spring boot to get the project started more quickly. Some advantages of spring-boot are that it makes deployment easier, has simplified scalability, is compatible with containers, has a little configuration, and minimizes time in production. The web app uses Rest API and CRUD commands to create, read, update, and delete users, surveys, and resource information. Also, the web app uses JPA hibernate to persist data to a MySQL database.

Fall 2022

Our fall 2022 project team used MYSQL, AWS Beanstalk, and AWS Quick sight.

**MYSQL**

We uploaded SQL scripts into MySQL to insert information about the resources available to students, such as dependent, housing, and food resources. We added SQL scripts for users such as students, admins, and employees. Also, if a user adds information through the web app, this information is persisted from the web app to the MySQL database.

**AWS Elastic Beanstalk**

We used AWS Beanstalk to deploy our web app. We decided to use infrastructure as a service because it allowed us to automate many services, such as system resources, storage usage, and networking, without using our physical resources or running integration scripts to make all the different technologies work together. Instead of using our machine as a server and networking device, we used Amazon’s cloud computing to host our webpage. We uploaded our target file to Aws Elastic Beanstalk service, and it took care of the rest, such as containerizing our app. The container is essentially the web app with all its dependencies. Also, we created a MYSQL database engine with an AWS RDS instance for cloud storage of the web app data.

Also, Elastic Beanstalk can scale the website based on how many resources it needs at any instance, then scale down if those resources or no longer needed. For example, if a webpage is getting too many requests from clients, it can scale up to remain available to those clients.

**AWS Quicksight**

Aws Quicksight provided Business intelligence, analytics tool, reports, and data visualization. Also, users of the service can ask questions about the data in natural language. Developers embed analytics tools into web apps.

Future Youth homelessness project team may embed MYSQL data via QuickSight into the web app.

We hope you the best in Your project, and thank you for reading.