

NextStep Health

Project Sponsor: Sam Warach Team Members: Maeve Burwell, Joshua Hoffman, Andrew Kirk, Martin O'Sullivan Computer Science Department



Introduction

NextStep Health is a company that presents data and evidence-based interventions to improve population mental health and reduce downstream costs within health & education systems.

Our goal for the project is to dynamically generate learning modules using Artificial Intelligence. A learning module is an interactive educational article within the NextStep Health app. This will allow for automated module generation which can allow for numerous modules to be generated at once. The intent is for this to save time for the company, but this will need to be evaluated further in the future.

NextStep Health App

The NextStep Health app is a collection of resources designed to help users navigate mental health challenges. This includes a variety of learning modules, which is a collection of readings intended to educate the user. We want to find a way to speed up the process of creating these modules.

Requirements

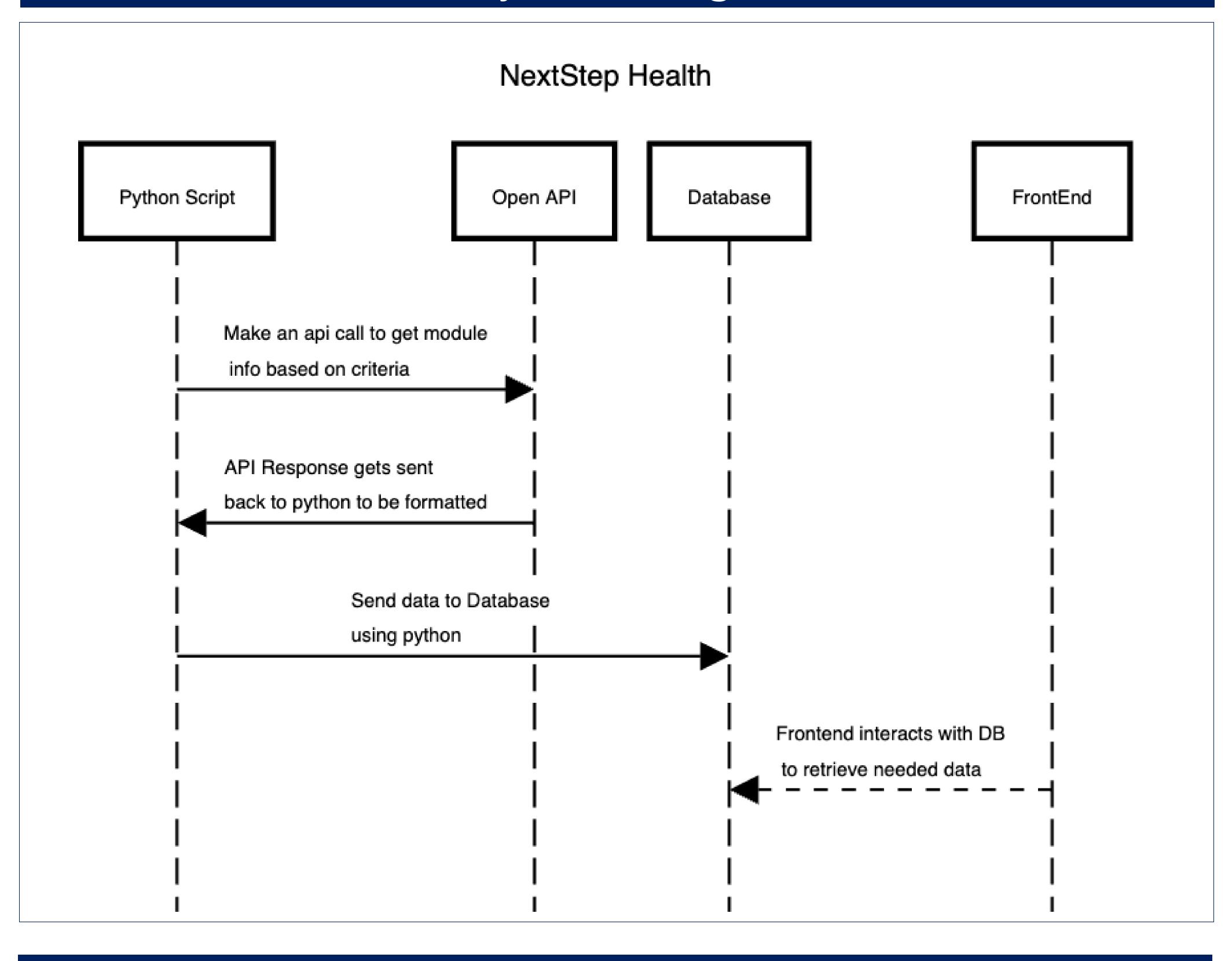
Functional Requirements:

- •Modules are sorted by category.
- •Modules are generated through Python script API call
- Modules will be stored in database
- •Modules will be displayed in a specified format on the app interface

Nonfunctional Requirements:

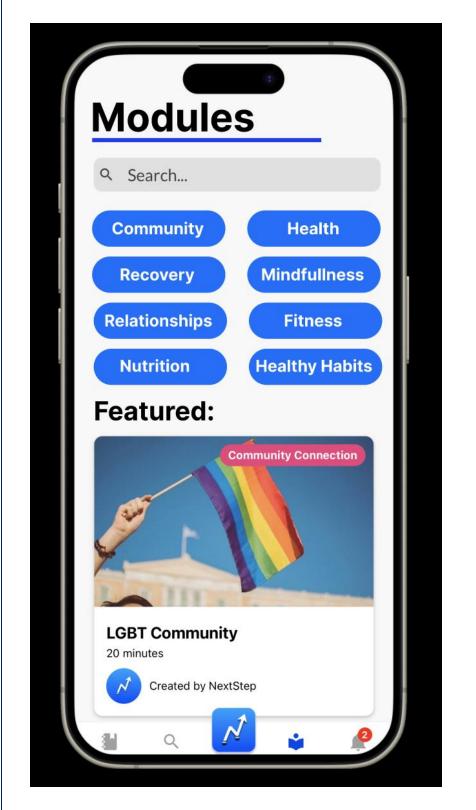
- •All modules are organized in sections of header, sub header, body, and image.
- •Any modules can be populated into the app with the same format.

System Design



Module Design Diagrams

Modules Home-page



This is the Module
Home-page. The
purpose of this is to
give a method of
organization for the
user of the learning
modules within the
app. The user can
choose from an array
of categories, or
view featured
modules

Back

Heading Subheading

Module

This is the general format of a module. It will be comprised of a heading, subheading and body. There may also be images within the body. These sections will be populated from the specific fields within a JSON file

Testing

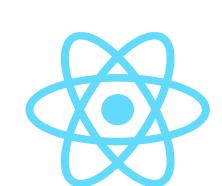
- API: We need to ensure that the API will return appropriate and relevant articles when we are creating modules.
- Database: Test CRUD operations on the database and ensure desired action occurs.
- Front-end: We need to be able to test the data that we are getting from the database, ensuring that it is of the desired format needed to populate the modules.

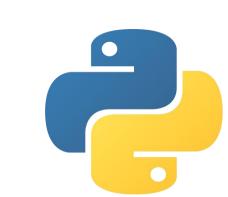
Conclusions

This project saved time for the company by automating module creation based on relevant mental health topics. It also limited the time of researching and creating all the way down to proof reading and editing of the modules. This allowed NextStep Health to release more educational content to help those seeking mental health resources from the app.

Technologies Utilized

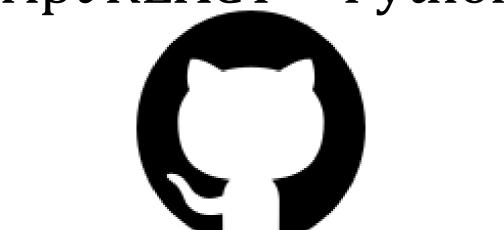






OpenAI API T

TypeScript REACT Python



AWS Dynamo DB GitHub Code Repository

Acknowledgements

We would like to thank our advisor professor David Benedetto. Also, our project sponsor Sam Warach, CEO and Founder of NextStep Health.