CS673 Software Engineering

<u>Team 6 : College Street</u> <u>Software Design Document</u>



Team Member	Role(s)	<u>Signature</u>	<u>Date</u>
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Yin)		
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Revision history

Version	<u>Author</u>	<u>Date</u>	<u>Change</u>
1.0	Team 6	10/19/2023	<u>Writeup</u>

Introduction

Software Architecture

Class Diagram

UI Design (if applicable)

Database Design (if applicable)

Security Design

Business Logic and/or Key Algorithms

Design Patterns

Any Additional Topics you would like to include.

References

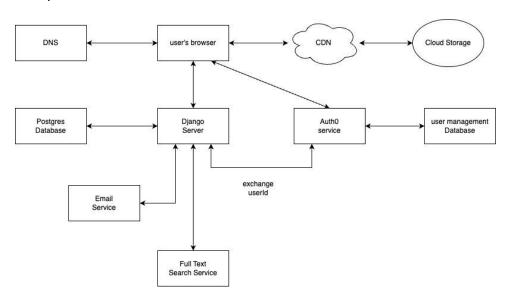
Glossary

Introduction

This document will be an overview of our project design and implementation for backend and frontend. We will describe the Software Architecture, Class Diagram, UI design, Database design, Security design, Business Logic, and Design pattern that we use for the project.

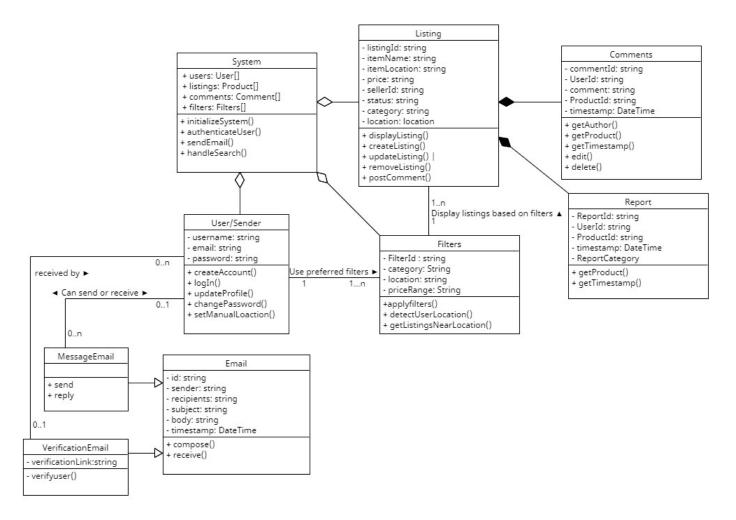
Software Architecture

Below is the SA diagram, currently this is the architecture components that we anticipated. Once we decide to add a new service to tackle the issue, we will update.



• Class Diagram

Below is the class diagram, v0, for the current version.

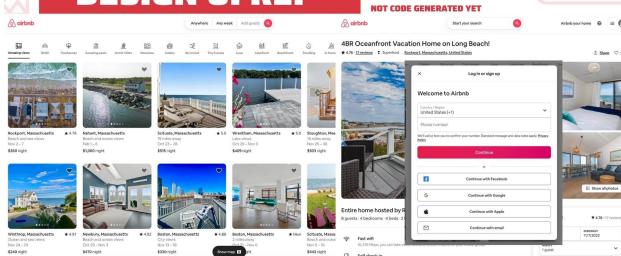


• UI Design

The ui design reference is from the airbnb and facebook marketplace. The UI will be clean on white theme with a tint of red for the excitement of the color, as for BU. However, using too much red in such an application could cause a lot of confusion while navigating, we decide to have the red as an accent color and use black and white as a main navigations.

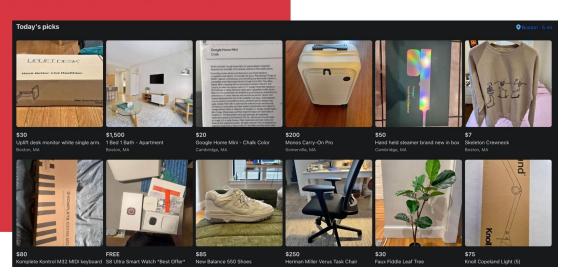




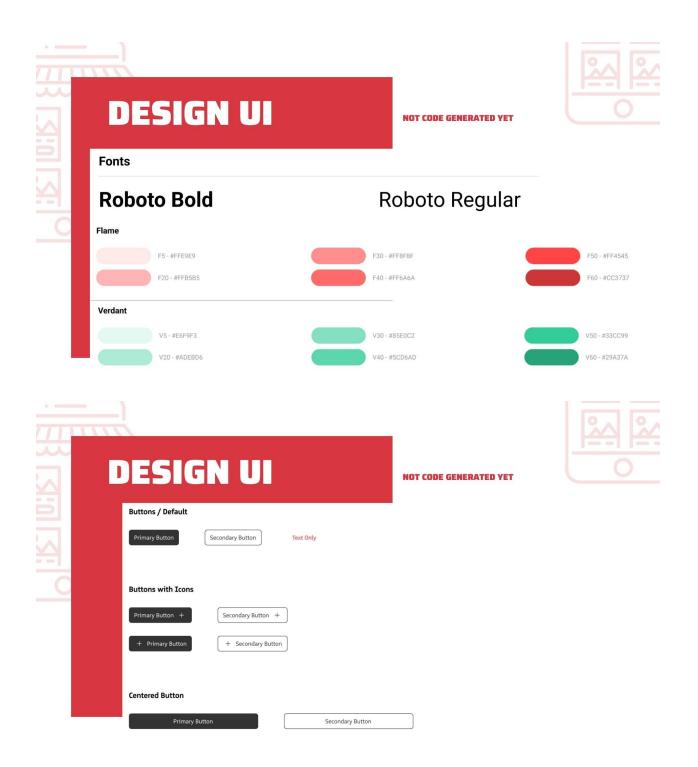


DESIGN UI REF

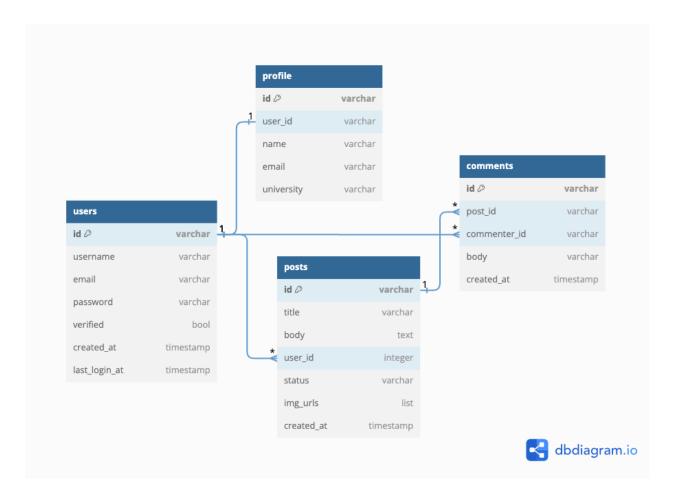
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Self check-in Check yourself in



• Database Design

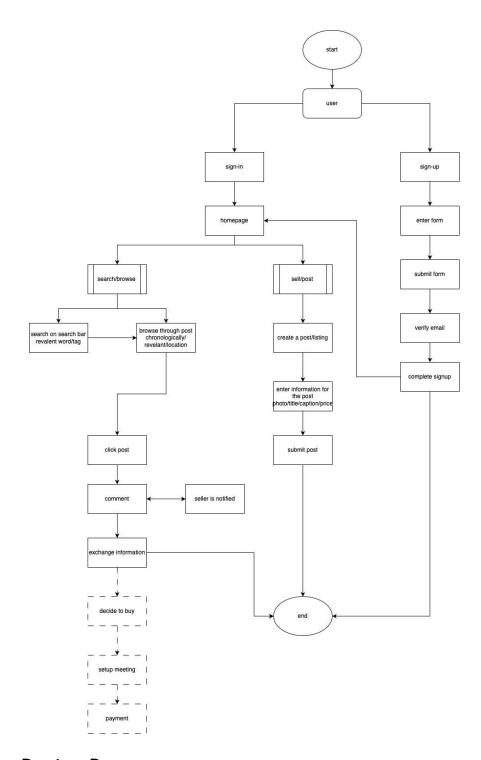


Security Design (We can skip this section)

We will skip this section for now, because we do not have a security design for any part of the design except for the privacy information design for the user to encrypt user information such username and password.

Business Logic and/or Key Algorithms

Below is the business logic flow of the program design. The key algorithms are search/browse, post, comment and verify email.



• Design Patterns

We use MVC (Model-View-Controller) Pattern, which separates the application logic into three interconnected components: the model (data and business logic), the view (user interface), and the controller (input handling and coordination). Our backend service will be written in Django and django-rest framework which by default uses MVC design pattern. Our client side code is written in ReactJS which uses Flux type Design pattern

but we are not following any certain design pattern for our clients. We are using ReactJS for our UI/UX design but React internally uses Flux design pattern.

- Any Additional Topics you would like to include.
- References
- Glossary