**4 Non-functional Issues**

**4.1 Graphical User Interface (GUI):**

The website will have some basic components: log in/out button and a search bar. These are the essential components for the front page. When pressing on the login button, it will send the user to a page where the user will be able to fill out their credentials with a login button underneath. The front page will also show 3-5 random listings from the listing database. The search bar will be at the top of the front page. The search bar will toggle down and allow the user to input keywords or select filters such as the type of housing. Once the user is logged in, the login button changes to a logout button and a “View Profile” hyperlink will appear next to it. The front page will now show the option to create a listing and view listings. The listing creation page will be a form that the user will fill out and will include variables to be filled out such as a title, pricing, number of bedrooms and bathrooms, and housing type. On the same page, the renter must provide a phone number and email address as well and a “Submit” button will be enabled at the bottom of the form once every requirement is filled out. When selecting the view listings page, it will give the user the option to select different categories of listings such as “House” or “Room.” From there, the user will be shown a page of listings of that category. When the user selects the “View Profile,” it will show the user’s information including name, profile picture, description, and listings. From here, the user is able to edit each information. When editing the listings, it will send the user to another page that shows all their listings and an “edit” hypertext. Once pressed, the user will be sent to a page that has all of the listing information filled out, and the user will be able to edit and press the “Confirm Changes” button at the bottom of the form.

**4.2 Security:**

Each user will require an email and password in order to login and access listings that only they have created and their own personal account information. The email and password will be stored in the server’s database and no users will be able to have access to view this.

**4.3 Access Control:**

Users will have access to their house listings and information such as description and pricing corresponding to it. Because they have access to this, users will be allowed to modify their listings through editing, deleting, or adding more listings. Users will be able to access their account information; this includes their name, contact information, and profile picture. However, users will not have direct access to the database in which their accounts and listings reside in. If they wish to make any changes to these, they will send a request to the database. The logic tier will read the changes and make changes to the database accordingly.