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## Milestone 4

### Updated Project Feature List:

- **Library of Java Content**
  - Ranging from start to finish of Introduction to Java , cover each topic covered in class. Concisely communicate syntax and detail purpose, function and use. Intent not to overwhelm the user in the way a textbook might but instead to provide clear, concise information to use as a reference while coding.
  - Include Pitfalls section for each section.
- **User Account Page**
  - Shows current sections.
  - Includes User information. (Name, Location)
- **Feedback Channel:**
  - On each page of the C++ Library, include a channel for users to communicate with us how we can better serve them and to identify things we have done well.
- **Drop Down Navigation Bar**
  - Navigation bar includes links to:
    - Search Bar
    - Home Page
    - C++ Library
    - About Us
    - Contact Us

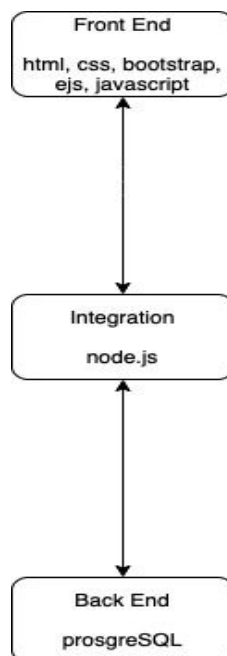
### Potentially dropping these features

- **Local Search Function**
  - Searches for keywords associated with each page
  - Why? We decided that with our navigation bar, searching is already very self explanatory and thus a search function would be unnecessary.
- **Check For Understanding:**
  - Prompt users to answer questions relating to content in quiz format.

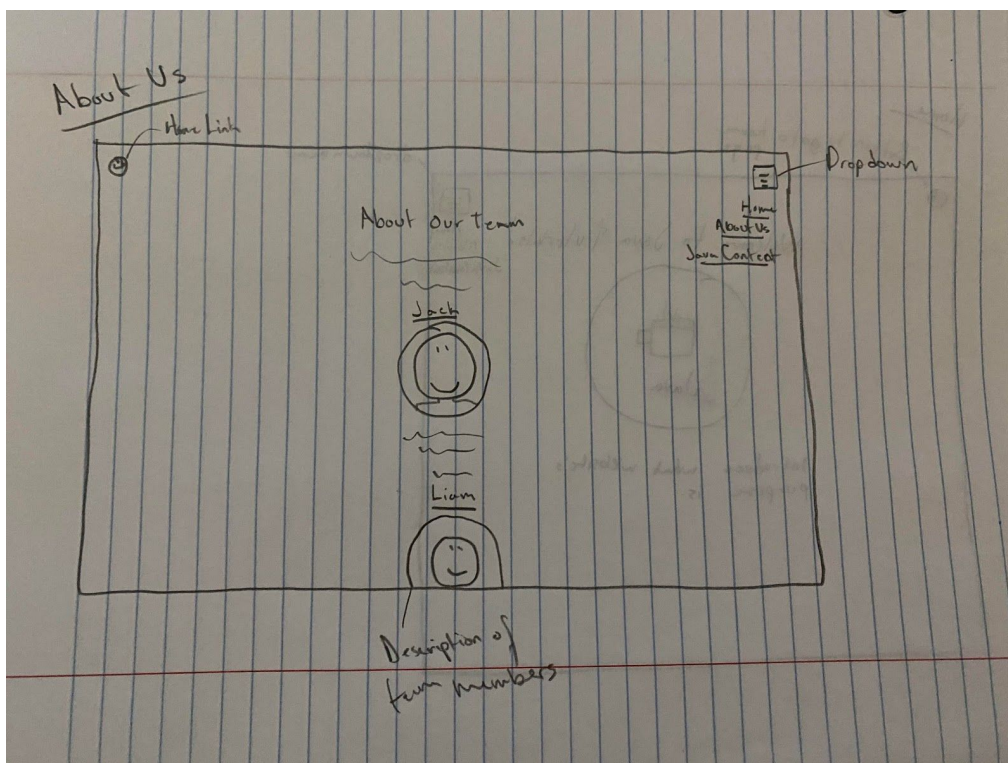
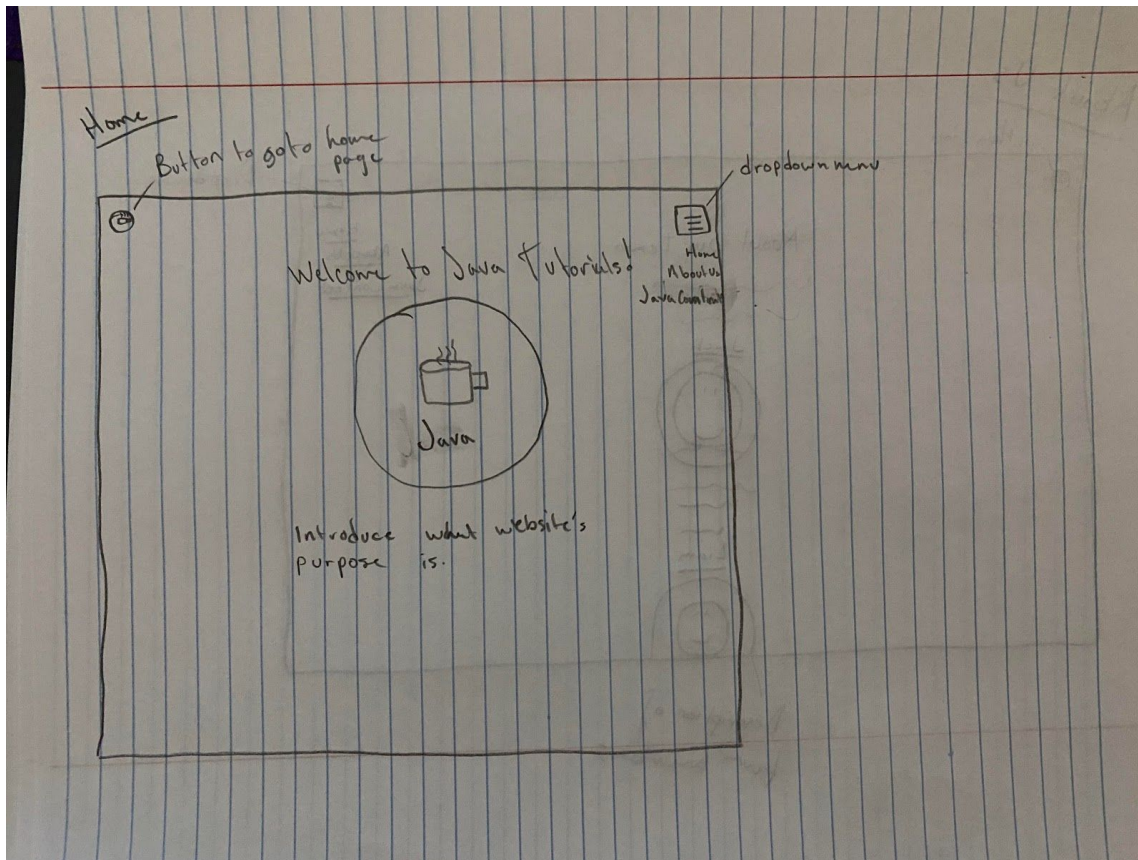
- Why? Rather than added a check for understanding section, we instead opted to include some more information that goes into greater detail which we believe is more useful than a check for understanding.

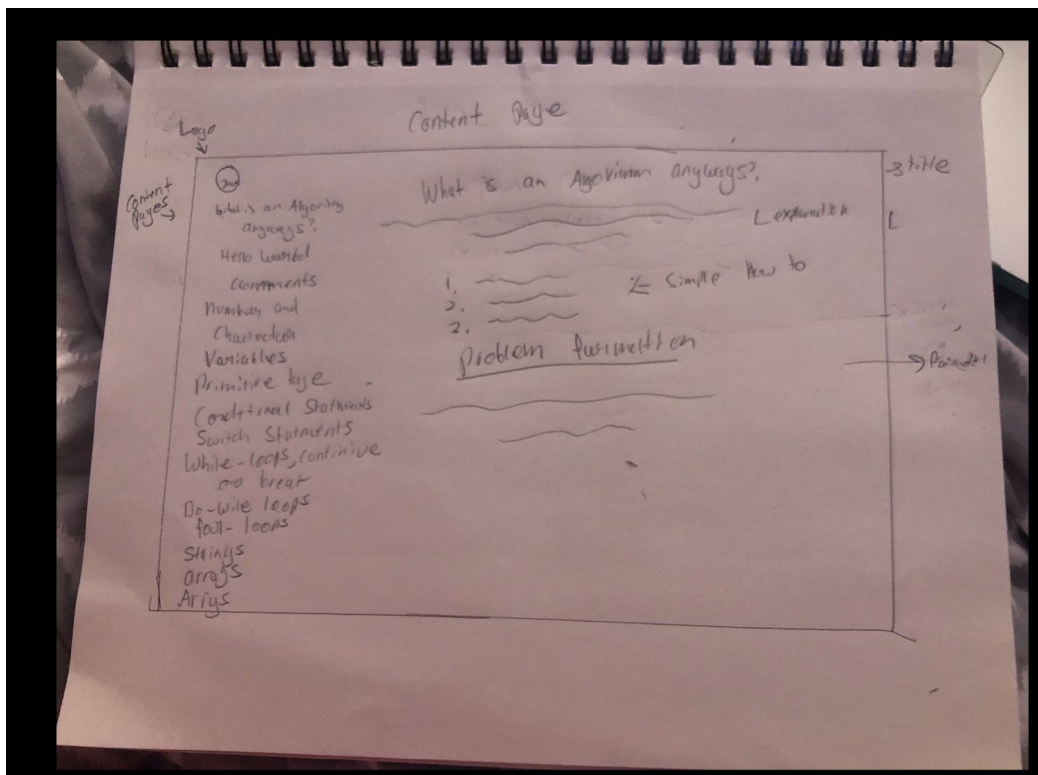
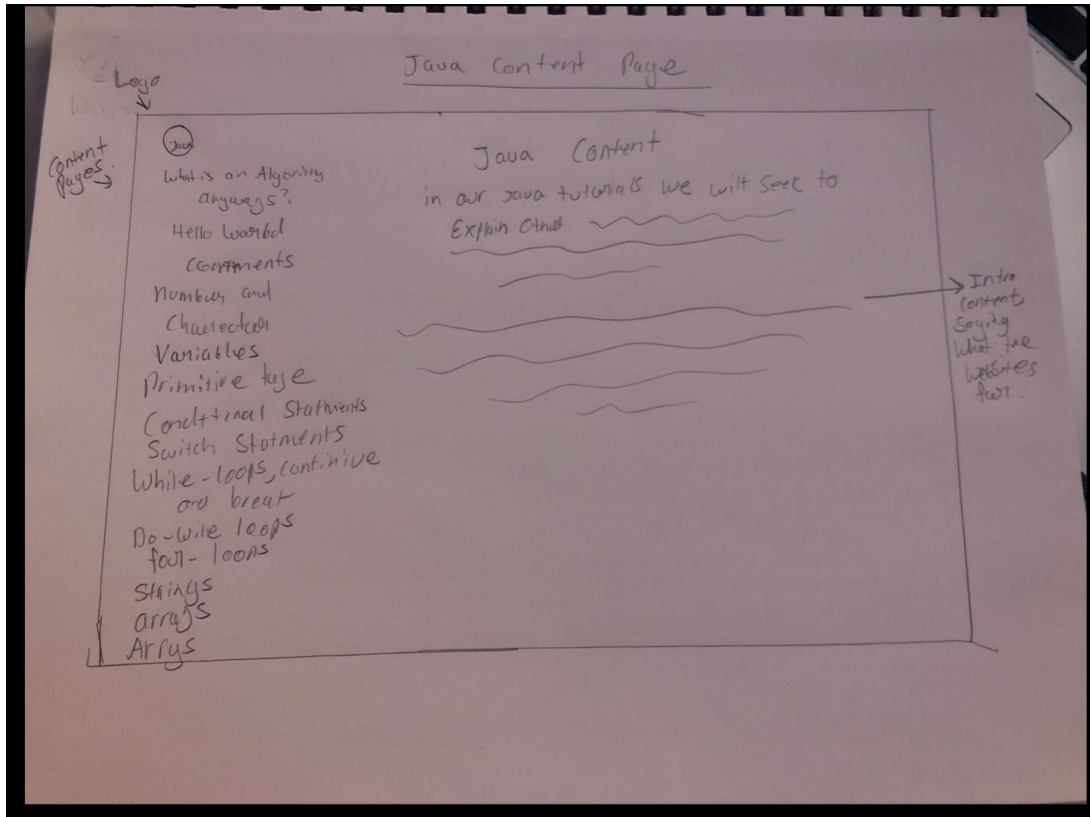
### Architecture Diagram:

- **Front |End**
  - We will be hosting the website and database on a Go Daddy Server. The Javascript components will communicate with the server utilizing node.js. We have created a style sheet for formatting the html content. All content is from a wordpress site with express permission from the host.
- **Integration**
  - When a user creates an account, Javascript will use node.js to translate into a postgresSQL query and then an insert statement will store the username and password into the database.
  - When a user posts a comment, an insert statement will be passed through node.js to store the comment into the database, then a query will be passed through node.js to retrieve all comments in the database and post them through the front end Javascript.
- **Back End**
  - PostgreSQL is the DBMS used for the backend. This server can be hosted on Go Daddy along with the website. Node.js is used to receive queries from the front end such as adding a user or pulling the user's information



## Front End Design:



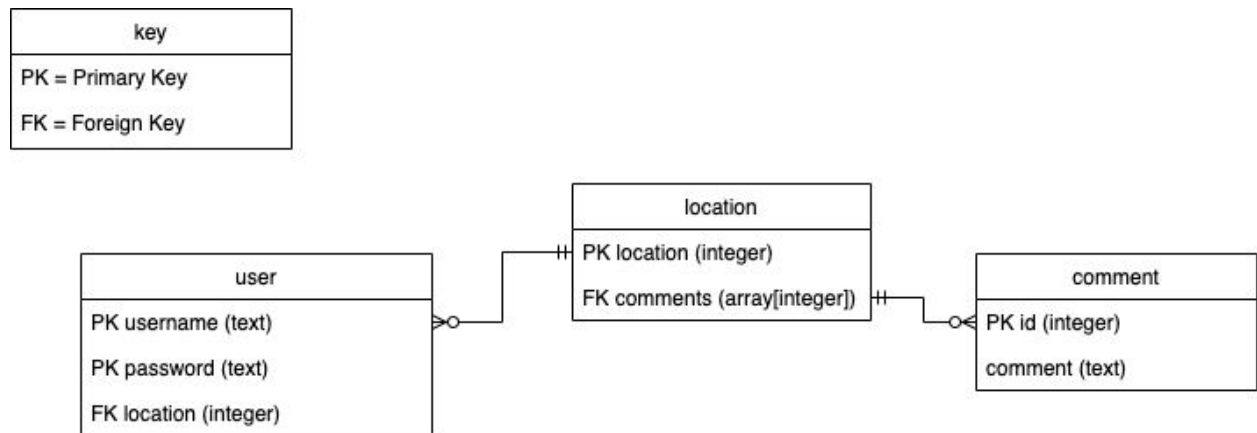


## Web Service Design:

We will not be using any web services

## Database Design:

We will be using the DBMS of PostgreSQL to store our application's data. Here is an Entity Relationship Diagram showing the data we will have:



As displayed, each user is defined by their username/password combination (do not yet have a cap on duplicate usernames but this may be implemented) and each user has a location, or a page location of where they are, and each page has their own set of comments.