Software Design Description for Board Game Reccomender

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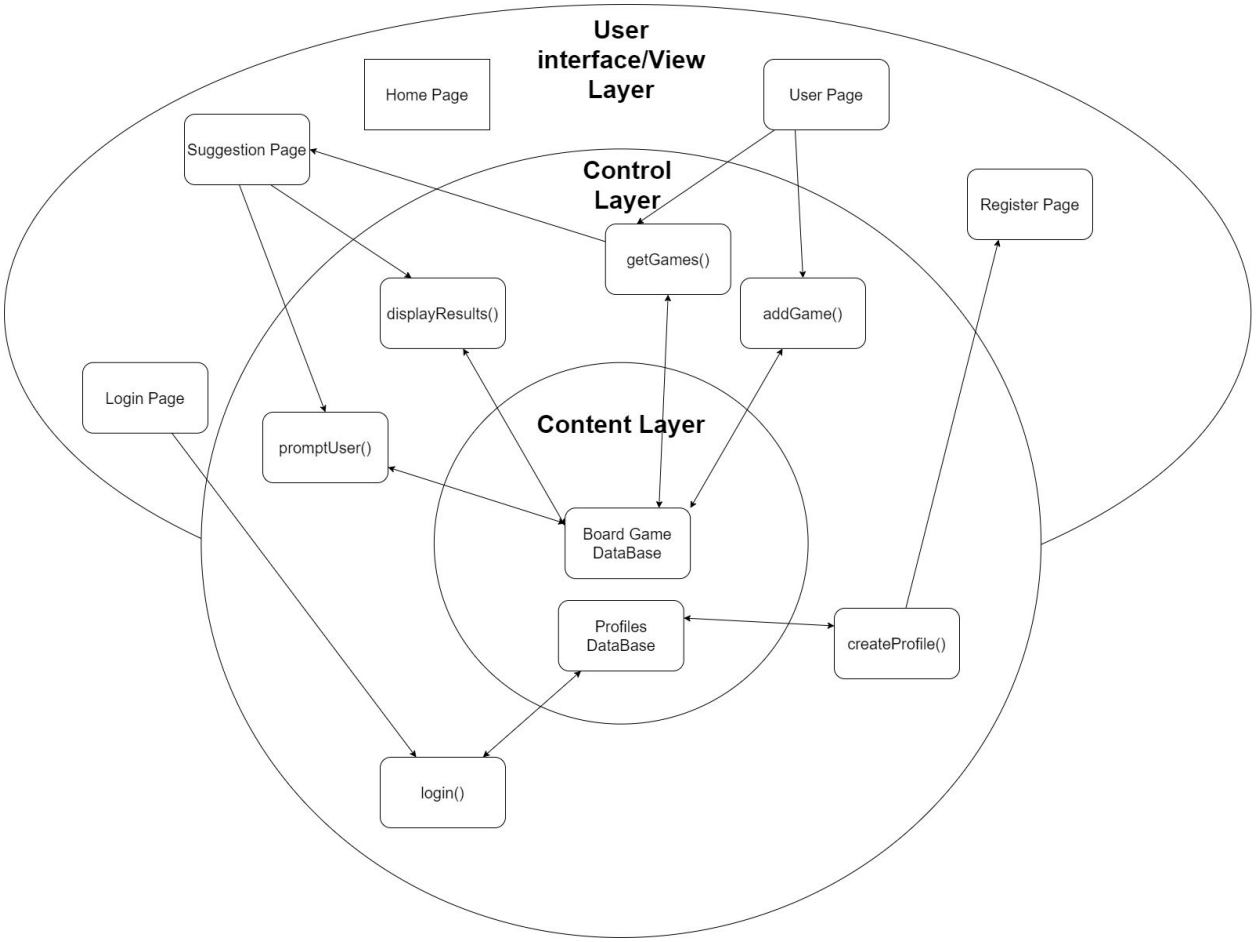
1. **Architectural Considerations**
    a. Economy
        i. Our design is pretty fat free. We only have features that are absolutely necessary, so the economy of our design is good.
    b. Visibility
        i. Between our diagram and class description we show all the important parts of the project and hopefully make it obvious why we chose to design it the way we did.
    c. Spacing
        i. Based on the nature of a layered design style, our spacing is immediately evident and clean cut. Also, our system is almost entirely modular.
    d. Symmetry
        i. Our design accounts for symmetry by having consistency throughout all of its different navigable pages and functions. Pages have very similar layouts and functions overlap in use wherever possible.
    e. Emergence
        i. Our project is a webapp, so its functionally is almost entirely based on user input/action. Because of this, we made our design very flexible to account for the unpredictability of a user.
2. **Component Design Principles**
    a. Our website will be designed with the principle of modularity in mind. Each component of our website will work independently allowing us to change out features of the website with ease. Another key feature of our modular design in the separation of UI from the back end. We will develop the html/css front end independently of the database allowing for us to modify either piece individually. We will also keep our code grouped into packages separating different features to allow for code reuse and for updating the code more efficiently.
3. **Class description**
    a. Identifier:SignUpView
        i. Type: class
        ii. Purpose: to serve the sign up page
        iii. Functions: (sign up) (Each of these classes has only a single function)
        iv. Subordinate classes: (none)
        v. Dependencies (Django)
        vi.
    b. Identifier:HomepageView
        i. Type:Class
        ii. Purpose: To serve users the homepage
        iii. Functions: homepage.(Class as single function)
        iv. Sub classes:None Dependencies: Django
    c. Identifier:recommendView
        i. Type:class
        ii. Purpose: To serve the recommendation page, and perform searches based on user input

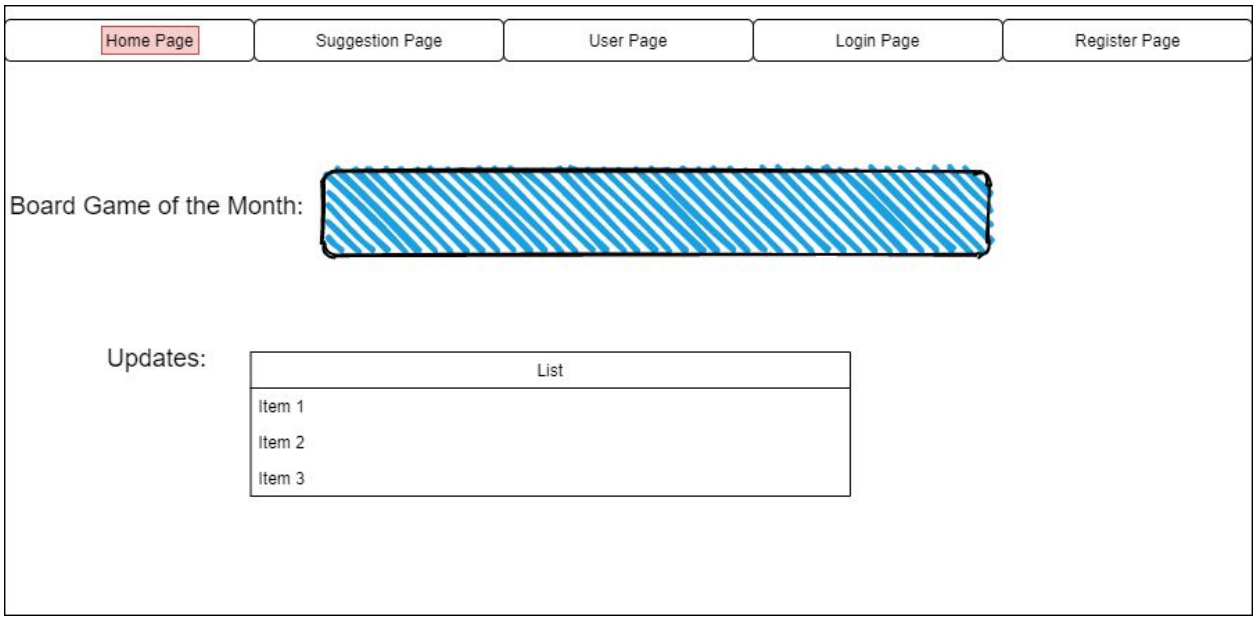
iii. Functions: recommend (Class as single function)
iv. Sub classes:None Dependencies: Django

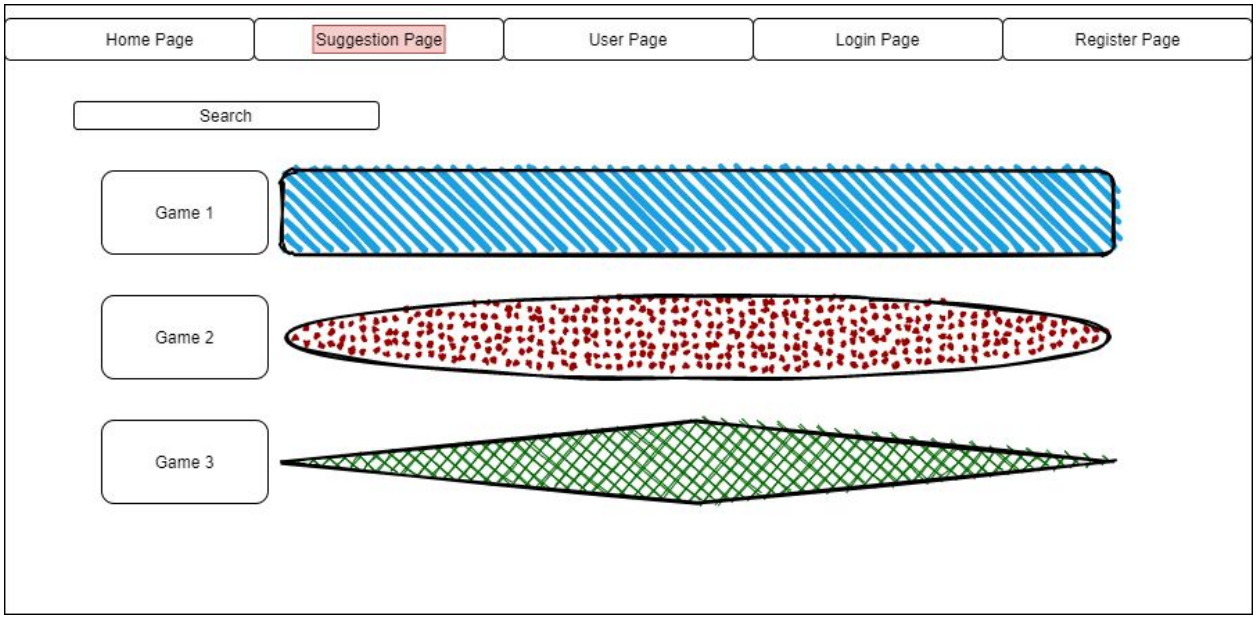
d. Identifier:user_gamesView
   i. Type:class
   ii. Purpose: To serve user detail page, and query the database to get user details
   iii. Functions: recommend (Class as single function)
   iv. Sub classes:None Dependencies: Django
e. Identifier:Game
   i. Type:database model object
   ii. Purpose: to store information about board games
   iii. Functions: __str()__, game(), __repr()__
   iv. Sub classes:None Dependencies: Django, django.db, django.model
f. Identifier:Tag
   i. Type:database model object
   ii. Purpose: To store attributes about games, allowing for identification of games.
   iii. Functions: __str()__, tag(), assign(), remove()
   iv. Sub classes:None Dependencies:Django, django.db, django.model
g. Identifier:Gamer(User)
   i. Type:database model object
   ii. Purpose: To store users, (based on django's user class) with additional attributes to allow linking games to users.
   iii. Functions: register(),login(),authenticate(),logout(),checkstatus(),getgames(),addgame()
   iv. Sub classes:None Dependencies: Django, django.db, django.model django.User

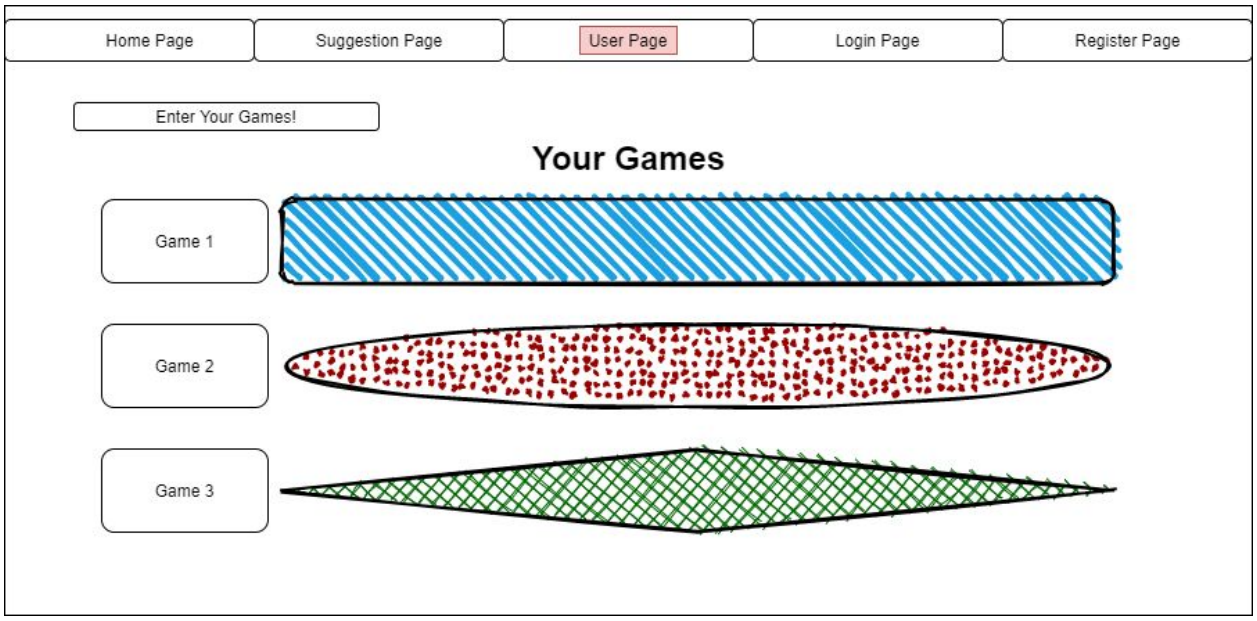
Appendix A


User interface/View Layer
Home Page
User Page
Suggestion Page
Control Layer
Register Page
getGames()
displayResults()
addGame()
Login Page
promptUser()
Content Layer
Board Game DataBase
Profiles DataBase
createProfile()
login()

Appendix B


Home Page
Suggestion Page
User Page
Login Page
Register Page
Board Game of the Month:
Updates:
List
Item 1
Item 2
Item 3


Home Page
Suggestion Page
User Page
Login Page
Register Page
Search
Game 1
Game 2
Game 3


Home Page
Suggestion Page
User Page
Login Page
Register Page
Enter Your Games!
Your Games
Game 1
Game 2
Game 3


Home Page
Suggestion Page
User Page
Login Page
Register Page
Username
Password
Login


Home Page
Suggestion Page
User Page
Login Page
Register Page
Username
Password
Register