# bargain\_box

| Class       | Responsibilities  | Collaborators  |
|-------------|---|--|
| asgi.py     | <ul> <li>Entry point for compatible servers to serve the django application asynchronously</li> <li>Enables asynchronous support(such as support for running background tasks)</li> </ul> | <ul><li>settings.py</li><li>ASGI server</li></ul>  |
| settings.py | <ul> <li>Configures the projects settings (database connections, installed apps, middleware, static files paths</li> <li>Sets configurations for different environments</li> </ul>        | <ul><li>urls.py</li><li>wsgi.py</li><li>asgi.py</li><li>Django settings<br/>framework import</li></ul> |
| urls.py     | <ul> <li>Defines the URL routing patterns, which directs requests to specific views and specific apps</li> <li>Manages and includes URLs from other apps</li> </ul>                       | settings.py  |
| wsgi.py     | <ul> <li>Entry point for compatible web servers for the django application</li> <li>Configures app environment</li> </ul>   | <ul><li>settings.py</li><li>WSGI server</li></ul>  |

#### home

| Class  | Responsibilities   | Collaborators  |
|--|--|--|
| HomeConfig (in apps.py)                        | <ul> <li>Configure settings for home app</li> <li>Define primary key behavior</li> <li>Specify the apps name and app-specific settings</li> <li>Registers the app in Django's framework</li> </ul> | Django app import  |
| Home_page (in views.py)                        | <ul> <li>Handle HTTP requests for home page</li> <li>Renders necessary data in the home.html<br/>templates</li> </ul>  | <ul><li>Home.html</li><li>foundation.html</li></ul>                            |
| Foundation and home html (in templates folder) | <ul> <li>Template for the app, providing structure to the page like navigation top bar, search bar, ect.</li> <li>Also includes some scripts (for the search bar functionality)</li> </ul>         | <ul><li>Home.html</li><li>Foundation.html</li><li>Static files (css)</li></ul> |

#### post

| Class                   | Responsibilities                | Collaborators     |
|-------------------------|---------------------------------|-------------------|
| PostConfig (in apps.py) | Configure settings for post app | Django app import |

|                             | <ul> <li>Define primary key behavior</li> <li>Specify the apps name and app-specific settings</li> <li>Registers the app in Django's framework</li> </ul>   |   |
|-----------------------------|---|---|
| Post (in models.py)         | <ul> <li>Define structure of post (title, author, content, etc)</li> <li>Manage post validation</li> </ul>  | <ul> <li>PostListView</li> <li>PotDetailView</li> <li>PostUpdateView</li> <li>PostCreateView</li> <li>PostDeleteView</li> </ul> |
| urls.py                     | <ul> <li>Defines the url routes for viewing listings, viewing details of the post, creating, updating, and deleting posts as well.</li> <li>Defines the mapping from each url to each view</li> </ul>   | <ul> <li>PostListView</li> <li>PotDetailView</li> <li>PostUpdateView</li> <li>PostCreateView</li> <li>PostDeleteView</li> </ul> |
| PostListView(in views.py)   | <ul> <li>Displays all the posts in a list, as well as search feature view listings</li> <li>Renders the view to the correct html template</li> </ul>  | <ul><li>Post model</li><li>PostDetailView</li></ul>   |
| PostDetailView(in views.py) | <ul> <li>Displays a specific posts details (title, author, content, etc)</li> <li>Renders the details in the correct view template</li> </ul>   | Post model  |
| PostUpdateView(in views.py) | <ul> <li>Handles the editing of an existing post.</li> <li>Displays the form with current data that is editable</li> <li>Validates any new data if the user changes something, and saves the updates</li> <li>Redirects to success page upon success</li> </ul> | Post model  |
| PostCreateView(in views.py) | <ul> <li>Handles the creation of new posts.</li> <li>Displays empty form for users to fill</li> <li>Validates the data and saves the data to the database</li> <li>Redirects to success page upon success</li> </ul>  | Post model  |
| PostDeleteView(in views.py) | <ul> <li>Handles deletion of user posts, only made by the logged in user</li> <li>Takes user to "confirm deletion" page before deletion occurs</li> <li>Upon deletion, success message displayed</li> </ul>   | Post model  |

# user\_authentication

| Class                                    | Responsibilities  | Collaborators     |
|--|---|-------------------|
| userAuthenticationConfig<br>(in apps.py) | <ul> <li>Configure settings for userauthentication app</li> <li>Define primary key behavior</li> <li>Registers the app in Django's framework</li> </ul> | Django app import |

| user_account_registration (in views.py) | <ul> <li>Handles the http requests for user registration</li> <li>Validates the users data, making sure all fields are correct including strong password, valid email, unique username</li> </ul> | <ul><li>User model</li><li>UserRegistrationForm</li><li>User_account_signout</li></ul> |
|---|---|--|
| user_account (in views.py)              | <ul> <li>Display users account details</li> <li>Fetch users details and organize on page according to the profile view template</li> </ul>  | User model   |
| User_account_signout (in views.py)      | <ul> <li>Handles user sign out functions</li> <li>Upon success, success message displayed</li> </ul>  | Authentication framework     user_account_registra tion                                |

## user\_posts

| Class                        | Responsibilities  | Collaborators          |
|------------------------------|---|------------------------|
| userPostsConfig (in apps.py) | <ul> <li>Configure settings for user posts app</li> <li>Define primary key behavior</li> <li>Registers the app in Django's framework</li> </ul>   | Django app import      |
| urls.py                      | <ul> <li>Defines the url routes for accessing the posts including listing and detailed views.</li> <li>Defines the mapping from each url to each view for the user posts app</li> </ul> | • view_posts           |
| View_posts (in views.py)     | <ul> <li>Displays list of posts</li> <li>Fetches and presents the data of the post loaded into the correct template for users to view</li> </ul>  | Post model     urls.py |

## user\_profile

| Class                                | Responsibilities  | Collaborators     |
|--------------------------------------|---|-------------------|
| userProfileConfig (in apps.py)       | <ul> <li>Configure settings for user_profile app</li> <li>Define primary key behavior</li> <li>Specify the apps name and app-specific settings</li> </ul>                     | Django app import |
| UpdateUserTableForm (in forms.py)    | <ul> <li>Defines the form for updating the users information such as name and email.</li> <li>Validates the user's new data, and saves any updates to the database</li> </ul> | Profile model     |
| UpdateProfileTableForm (in forms.py) | <ul> <li>Provides form for updating the profile picture</li> <li>Validates the user's new profile data and saves any updates to the database</li> </ul>                       | Profile model     |

| Profile (in models.py)       | <ul> <li>Defines the profiles database table that links a user to their profile image</li> <li>Relates the profile to the user using a one-to-one relationship</li> </ul>  | <ul><li>updateUserTableForm</li><li>Signals.py</li></ul>   |
|------------------------------|--|--|
| signals.py                   | <ul> <li>Handle the creation of a user profile when a new user is created</li> <li>Handles deletion of user profile resources such as profile picture (the user deletes them)</li> </ul>   | <ul><li>Django signals</li><li>Profile model</li></ul>   |
| urls.py                      | Routes the URLs to profile related views like viewing and editing the profile  | <ul><li>views.view_profile</li><li>views.edit_profile</li><li>views.delete_profile</li></ul>                       |
| view_profile (in views.py)   | <ul> <li>Handles the HTTP GET request to display the profile page of the user</li> <li>Renders and fetches the users profile data (only for logged in users)</li> </ul>  | <ul><li>User model</li><li>Profile model</li></ul>   |
| edit_profile (in views.py)   | <ul> <li>Handles the HTTP GET request by provides the form for editing a logged in user's profile</li> <li>Handles the HTTP POST request by validating the form to make sure information is correct, and saves the updates.</li> </ul> | <ul> <li>User model</li> <li>Profile model</li> <li>updateUserTableform</li> <li>updateProfileTableForm</li> </ul> |
| delete_profile (in views.py) | <ul> <li>Handles the HTTP GET request to display the delete profile page of the user</li> <li>Handles the HTTP DELETE request which in turn logs the user out and deletes their records from the database</li> </ul>                   | <ul><li>User model</li><li>Profile model</li></ul>   |

# user\_registration

| Class                                 | Responsibilities  | Collaborators   |
|---------------------------------------|---|---|
| User_registration_config (in apps.py) | <ul> <li>Configure settings for user_registration app</li> <li>Define primary key behavior</li> <li>Specify the apps name and app-specific settings</li> </ul>  | Django app import   |
| register (in views.py)                | <ul> <li>Render the user registration form</li> <li>Process the user registration form</li> <li>Validate user_data with a successful form</li> <li>Handles GET requests to show registration page</li> <li>Handles POST requests to process the data from the form</li> </ul> | <ul> <li>UserRegisterForm</li> <li>User Model<br/>(creates user)</li> <li>Messages (for<br/>message feedback<br/>(success,fail))</li> </ul> |
| UserRegistrationForm (in forms.py)    | Defines the fields in the form and the order in which they appear in registration (username, email,   | <ul><li>User Model</li><li>Register (View)</li></ul>  |

| password)  • Validates user input, making sure password is strong, email is valid, username not taken.  • Handle data cleaning and transformation before saving to the database | Django forms import |
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