# 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 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 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 (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 users new data, and saves any updates to the database</li> </ul>	Profile model
UpdateProfileTableForm (in forms.py)	<ul> <li>Provides form for updating profile information such as bio, profile picture, etc</li> <li>Validates the users new profile data and saves any updates to the database</li> </ul>	Profile model

Profile (in models.py)	<ul> <li>Defines the profiles data structure including bio, profile image, etc.</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>view_profile</li><li>edit_profile</li></ul>
view_profile (in views.py)	<ul> <li>Handles the HTTP 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>	Profile model
edit_profile (in views.py)	<ul> <li>Provides the form for editing a logged in users profile</li> <li>Handles form validation to make sure information is correct, and saves the updates.</li> </ul>	<ul><li>Profile model</li><li>updateUserTableform</li><li>updateProfileTableForm</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 (creates user)</li> <li>Messages (for message feedback (success,fail))</li> </ul>
UserRegistrationForm (in forms.py)	<ul> <li>Defines the fields in the form and the order in which they appear in registration (username, email, password)</li> <li>Validates user input, making sure password is strong, email is valid, username not taken.</li> <li>Handle data cleaning and transformation before saving to the database</li> </ul>	<ul><li>User Model</li><li>Register (View)</li><li>Django forms import</li></ul>