**Main Features of the Three projects:**

**Social media App for fitness**

* **User profile:** showcase skills, interests and achievements
* **User interaction:** Follow each other and messages
* **Global leader board:** displays the rankings of the most progress
* **Specialised leader boards:** different leader boards for various areas such weightlifting
* **Discussion forums:** Forums where the users can engage in technical discussions, seek advice and share knowledge with the community.
* **News feed:** A feed where users can post updates, articles, projects and participate in discussions
* **Gym integration:** users can check in to their local gym see who else is there in the app, join group chats with fellow gym members
* **Authentication and security:** secure user authentication mechanisms to protect user data and ensure privacy
* **Notifications**: notify users about coding challenges, leader board updates, new posts and other relevant activities within the app.
* **Customization**: options for users to customize their profiles, set preferences, etc
* **Progress tracking:** users can log workouts, track fitness progress and set personal goals
* **Workout scheduling:** ability to plan and schedule workouts, set reminders and share schedules with friends
* **Community building:** tools for organising events, challenges and fostering supportive fitness community

**Social media App for Developers**

* **User profile:** showcase skills, interests and achievements
* **User interaction:** Follow each other and messages
* **Global leader board:** displays the rankings of developers based on coding challenges
* **Specialised leader boards:** different leader boards for various areas such as programming languages, frameworks and technology domains,
* **Discussion forums:** Forums where the users can engage in technical discussions, seek advice and share knowledge with the community.
* **News feed:** A feed where users can post updates, articles, projects and participate in discussions
* **Weekly coding challenges**: regular coding challenges with varying difficulty levels and topics to encourage skills development and competition.
* **Project submission:** users can submit their coding projects for review and inclusion in their profiles.
* **Authentication and security:** secure user authentication mechanisms to protect user data and ensure privacy
* **Notifications**: notify users about coding challenges, leader board updates, new posts and other relevant activities within the app.
* **Customization**: options for users to customize their profiles, set preferences, etc

**Security system**

* **Motion detection**: detects any movement within the cameras field of view, triggers alerts and recording footage
* **Facial recognition:** recognises registers house members faces allowing personalised notifications when they enter the home
* **Notification system:** sends alerts to users smartphones or email addresses when motion is detected or recognised faced enter the home
* **Remote access :** allow users to access live video feeds and recorded footage remotely from their smartphones or computers
* **Customizable alerts** : enables users to customise notifications preferences such as sensitive levels and specific times for receiving alerts
* **activity log:** maintains a log of all detected events, including motion detection, face recognition and user entries and exits, for historical references
* **Security and privacy** ensure data security and privacy by implementing encryption protocols by implementing encryption protocols and secure storage for facial recognition data and video footage
* **Scalable :** designed to support multiple cameras for comprehensive coverage for the entire property
* **User-friendly interface**: provide an intuitive user interfaces for easy registration of faces, management of notification and viewing of security footage