Project Name: My Training App

Project Member: Raghad Alsulami

Summary of Project

My Training App aims to revolutionize finding and applying for training opportunities in Saudi Arabia. By bringing students and organizations onto one platform, the app streamlines the search for relevant training offers, provides comprehensive information about companies, and allows users to share their training experiences. The app will be developed for Android devices using Java programming language and Firebase for the database.

Project Analysis

• Value Proposition

The app addresses the pain points faced by students in finding suitable training opportunities, including the lengthy search process, lack of information about companies, and limited access to available offers. These pain points are validated by research showing that students often struggle to match their interests with available internships and lack a centralized platform for training opportunities.

• Primary Purpose

The project's primary purpose is to provide a user-friendly platform that benefits both students and organizations. Students can easily find and apply for training offers that match their interests and gain real-world experience. Organizations can attract qualified trainees and contribute to their success.

• Target Audience

The target demographic includes university students and graduates in Saudi Arabia seeking training offers. This demographic was chosen because they face specific challenges in finding relevant internships and are a key segment for bridging the gap between academia and industry. I plan to reach this audience through targeted marketing campaigns in universities and online platforms frequented by students.

• Success Criteria

The app's success will be measured by user satisfaction, the number of successful matches between students and organizations, and positive feedback from both parties. Additionally, an increase in the number of training offers posted on the platform, and the growth of user engagement will indicate the app's success.

Competitor Analysis

Competitors in the market may offer similar services, but they lack the comprehensive features and user experience My Training App provides. My strengths are providing detailed information about companies, facilitating user reviews, and offering personalized recommendations based on user preferences. However, I have included a table for competitor analysis that highlights the main differences between similar applications and my app, "My Training."

- Idealist

Idealist is a non-profit company that aims to facilitate searching for a job or training. It publishes all offers through the website. It provides several diverse jobs around the world. They offer several options for students' internships. Also, it lists many organizations that are interested in volunteering. The applicant can choose the type of work he/she wants, whether it is a job, training, or volunteering, using an easy way to search and look for companies that are suitable for him/her [1].

- Bayt

Bayt.com is a leading job site in the Middle East, offering a wide range of employment solutions and career tools. With a strong presence in English, Arabic, and French, Bayt.com caters to both employers and job seekers, boasting a user base of over 49 million professionals and 40,000 organizations. Their commitment to the region is evident through a fully trilingual platform and 11 regional offices across key cities. Despite their success, My Training App can differentiate itself by focusing on specialized training opportunities for students, bridging the gap between academia and industry and offering unique features like detailed company profiles and personalized recommendations. [2].

Table 1: Competitor Analysis

Criteria	Idealist	Byte	My Training
Platform	Website & mobile App	Website & mobile App	Mobile App
Training offers	√	√	✓
User profile	√	√	√
Organization profile	√	√	√
Searching for Organizations based on demographics	√	×	√
Considering universities offers	√	×	√
Organization reviews	×	×	✓
Matching applicants with offers	√	×	✓
New offer notifications	√	√	✓

• Monetization Model

The app will follow a freemium model, offering basic features for free to attract users and charging a subscription fee for premium features such as advanced search filters and priority application processing. Additionally, partnerships with companies for featured listings and promotional opportunities will contribute to revenue generation.

Initial Design

The Minimum Viable Product (MVP) for My Training App will include essential features to provide users with a functional and valuable experience. The scope of the MVP will cover the following components:

- 1- User Registration and Profile Management: Users can create accounts, complete their profiles, and manage their information, such as education details, skills, and interests.
- 2- Training Offer Listings: The app will display a list of available training offers from various companies, including position, company name, location, duration, and requirements.

- 3—Search and Filtering: The user can search for organizations and offers by the organization's or offer's name.
- 4- Application Submission: The user can apply for a training offer that suits his/her interests.
- 5- Company Profiles: Detailed profiles of participating companies, including descriptions, reviews, ratings, and contact information.
- 6—Notifications: Users receive notifications about new training offers that match their preferences, application status updates, and company messages.

• UI/UX Design

The UI/UX design for the MVP will focus on simplicity and ease of navigation.

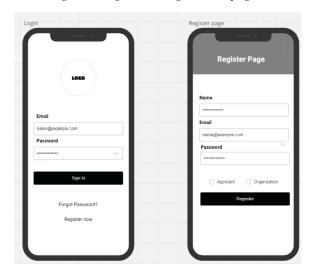


Figure 1: Log in and Registration pages.

Figure 2: Applicant home page and create CV page.

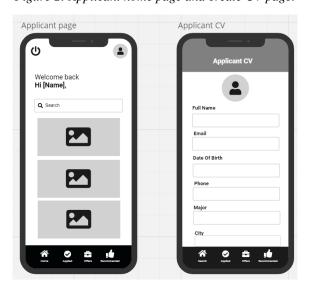


Figure 3: Applied offers page and add rate page.

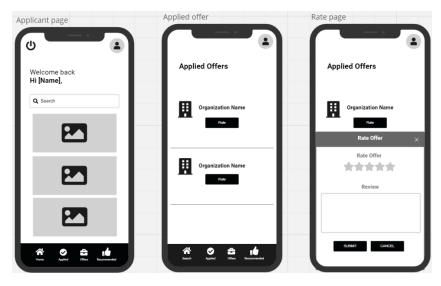


Figure 4: Training offers page, offer details page and view offer review page.

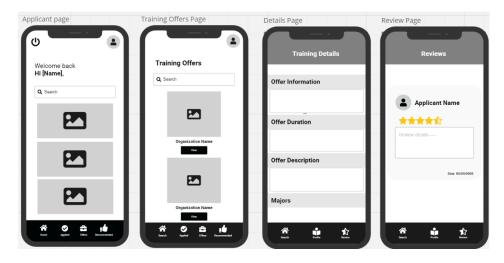
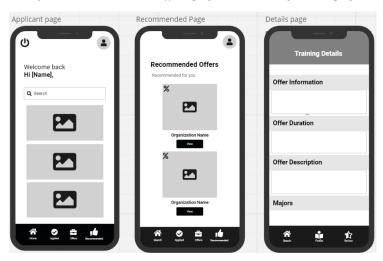
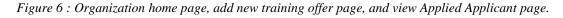
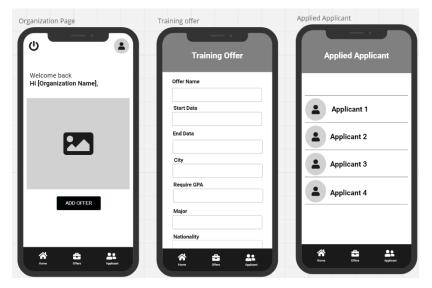


Figure 5: Recommended offers page and Training details page







• Technical Architecture

The technical architecture to support the MVP will include:

- 1- Frontend: Developed using Android Studio with Java for Android devices, ensuring a responsive user experience.
- 2- Backend: Firebase will be utilized for user authentication, real-time database management, and cloud storage for documents such as resumes and cover letters.
- 3- Data Structures: User profiles, training offer details, application data, and company information will be organized using Firebase's JSON-like structure.
- 4- Web/Cloud Interactions: The app will interact with Firebase APIs for user authentication, database queries, and notifications. Cloud functions may be used for background tasks and notifications.
- 5- Success Metrics: Key metrics for measuring success include user engagement (active users, time spent on the app), application submission rates, successful matches between users and companies, and user feedback/ratings.

Challenges and Open Questions

During the implementation phase of the My Training application, I may encounter several challenges and open questions. Here are two implementation challenges specific to the training implementation phase:

1- Integration with Firebase:

Challenge: Using Firebase may present challenges due to its novelty and limitations. Retrieving data from Firebase can sometimes be slow due to its online nature, and creating complex queries involving multiple tables may not be straightforward.

Solution: To address this challenge, self-learning, leveraging online resources, and referring to Firebase documentation will be essential. Exploring optimization techniques such as data caching, efficient data structures, and minimizing network calls can help improve performance.

2- Android Studio and UI Design:

Challenge: Working with Android Studio, especially for beginners, can be challenging. Issues such as linking the app to the Firebase database, dealing with emulator crashes, and designing flexible and intuitive interfaces can pose difficulties.

Solution: Overcoming these challenges will require learning through tutorials, troubleshooting common issues like emulator crashes, and mastering UI design principles. Exploring alternative UI frameworks or libraries that offer more flexibility in design can also be beneficial.

Additionally, other open questions and challenges that may arise during implementation include:

Data Privacy and Security: Ensuring robust security measures to protect user data stored in Firebase, such as implementing encryption and complying with data protection regulations.

User Feedback and Iterative Development: Collecting user feedback during testing phases and incorporating iterative improvements based on their suggestions and preferences.

Scalability: Ensuring the application architecture and infrastructure can handle a growing user base and increasing data volume without compromising performance.

Addressing these challenges and open questions through proactive problem-solving, continuous learning, and improvement will contribute to the successful implementation of the My Training application.

References

- 1- Jobs, Volunteering, Grad Schools, and More Idealist." https://www.idealist.org/en/(accessed Oct. 11, 2021).
- 2- "Bayt.com," Bayt.com, 2015. https://www.bayt.com/