Initial Mockup

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.

ANALYSIS

Requirements Engineering

I describe the system requirements here, divided into functional and non-functional requirements. Functional requirements describe the system's functions, while non-functional requirements define how the system should perform.

1- Functional Requirements

The system must enable the applicants to:

- Create account and login/logout the system.
- Create and edit CVs.
- Search for organizations and training offers.
- View organizations profiles.
- View recommended training offers.
- View training offers and reviews.
- Apply for a training offer.
- Rate training offers.

The system must enable the organizations to:

- Create account and login/logout the system.
- Create and edit profile.
- Add and view training offers.
- View applied applicants.

2- Non-functional Requirements

- Availability: The system should be available and accessible to users all the time.
- Usability: The system should be easy to work on.
- Reliability: The system should perform its functions without failures.
- Performance: The system should respond fast to the users (e.g. two seconds or less to load pages).

DESGIN

High Fidelity Prototype

High-resolution computer-based prototype defines the design's clarity and depth. It usually provides realistic mouse and keyboard interactions. Prototyping in high resolution takes you as close to a true portrayal of the user interface as feasible. High resolution prototypes should be more effective in collecting real world human performance data [1]. The following figures show the main My Training application interfaces (See Figure 1-10).

Applicant Functionalities

Here I will be talking about the applicant user functionalities such as log in to the system, create and edit CV, search for organizations and offers, view training offers and reviews, view organizations profiles, view recommended training offers, and apply and rate training offers.

• Create account and login.

The registration page, shown in Figure 1, contains three required entries to complete the process of creating an account in the application. The required information is the user's name, email, password, and user type to determine if user is an applicant or an organization. When the user clicks on the "Register" button, the app validates all user inputs, such as that if not all fields are filled in, an error message will appear. Also, the entered email is correctly written and not previously registered in the database. If the entered email was previously registered, an error message will be displayed indicating that the email is already registered. The app also makes sure that the password is not shorter than 6 digits, otherwise a message will be displayed that the password is incorrect. After completing all conditions, an account is created for the user and stored in the database. Once users are registered, they can use the log in page to login to the system.

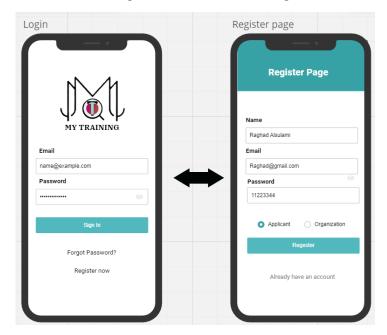


Figure 1: Create account and login.

• Applicant Home Page

The applicant's home page contains different options for applicants to follow. There is a button to create a CV for the applicant. Applicants can also see all the companies with their training offers and can also search for a specific offer. The applicant can go to the Recommended Page to show all recommended offers based on possible matching between the offers and the information in the applicant's CV. The applicant can go to the Applied Offers page to see all the offers that the applicant has applied for. The logout button is used to log out from the app and takes the applicant to the login page.

• Create and Edit Applicant CV

The applicant CV page, shown in Figure 2, is used to enter all applicant information, such as uploading the applicant photo, and entering full name, date of birth, city, GPA, skills, interest, email, phone number, nationality, and major. All fields are required so that an empty field is not allowed. The applicant can also modify the information that has been previously entered. When the applicant clicks on "Save" button, the data will be stored in the database. When the applicant clicks on "Cancel" button, the user be directed to the home page.

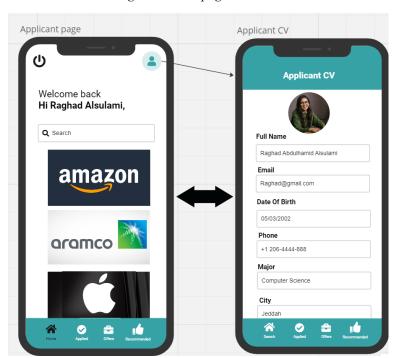


Figure 2: Home page and create CV.

Search for organizations and View organizations profiles.

Applicants can search for organizations that added training offers by organization name and view their profiles.

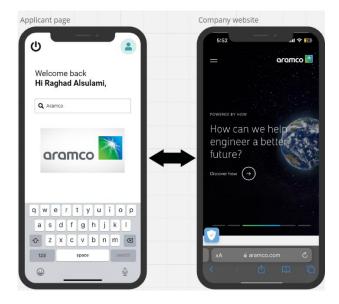


Figure 3: Search and view organization profile

• View Training Offers and Reviews

In this page all training offers are displayed as shown in Figure 4. The applicant can search for offers by an offer name and see all the details of the training offer such as main information, duration, description, etc. The applicant can view all previous reviews for each offer to read about the experience of previous applicants.

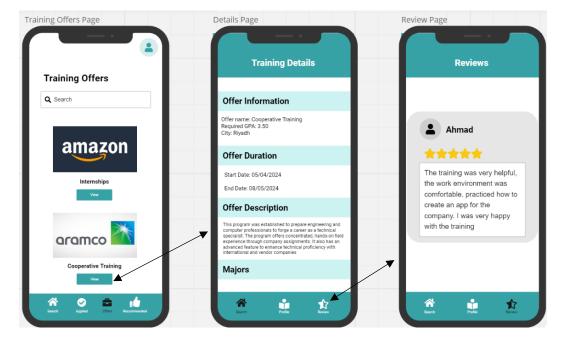


Figure 4: View Training Offers and Reviews

View Recommended Training Offers

The applicant can view the recommended training offers that have been matched to applicant CV as shown in Figure 5. First, when the applicant opens the application, a notification message will appear notifying the applicant that some recommended offers are available. When the applicant presses on "show me" button, a recommended offer page will be displayed. In this page, we show percentages for each training offer, the percentages represent the matching between training offers and the applicant preferences.

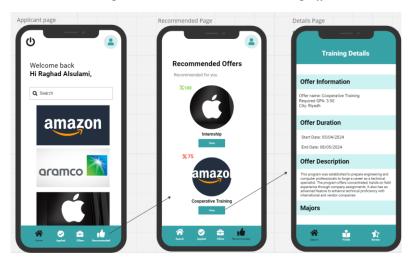


Figure 5: View Recommended Training Offers

• View and Rate Applied Offers

In this page, shown in Figure 6, applicant can view all training offers that have been previously applied to, and can rate the training offer. Applicants can rate by press on the "Rate" button in the applied offers page. A dialog box appears to the applicant to write a review and rate by stars. After that, the rating value will be shown. When applicant presses on "submit" button the rating value and review will be stored in the database. The applicant can cancel the rating by pressing on the "Cancel" button.

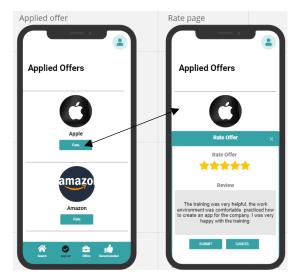


Figure 6: View and Rate Applied Offers

Organization Functionalities

Here I will be talking about the organization user functionalities, such as Log in to the system, create and edit profile, add training offers, view and edit training offers, and view applicants.

• Organization Home Page

The organization's home page, shown in Figure 7, contains five main options for an organization to follow. The Create Company profile button is used to go to the profile page then the organization can fill in the company information. Add offers button is used to fill the details of a new training offer. Also, an organization can view all training offers that were previously added. View applicants page is used to view all applicants who have applied to each offer. The logout button is to go back to the login page.

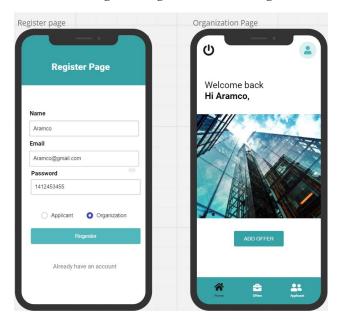
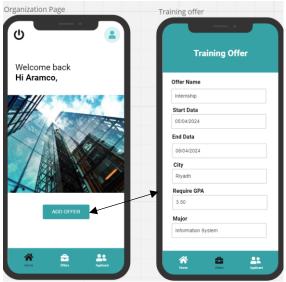


Figure 7: Organization Home Page

• Add Training Offers

The Training offers page, shown in Figure 8, is used to enter training offer information, such as offer name, duration, city, required GPA, major etc. All fields are required to be entered, and no empty fields are allowed. When the organization clicks on "Save" button, the data will be saved in the database. When the organization clicks on "Cancel" button, the organization is directed to the home page.

Figure8: Add Training Offers



• Create and Edit Profile

The organization's profile page, shown in Figure 9, is used to enter the organization's information such as uploading an image for the organization logo, and entering the organization name, vision, brief, ect. The organization can also modify the information that has been previously entered. When the organization clicks on the "Save" button, the data will be saved in the database. When the organization clicks on the "Cancel" button, the organization is directed to the home page.

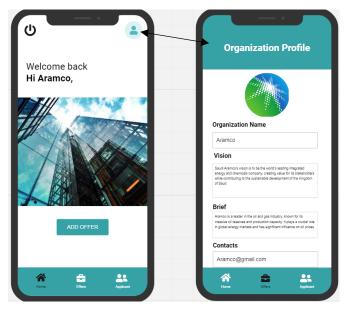


Figure 9: Create and Edit Profile

• View All Applicants

In this applicant page, shown in Figure 10 the organization can see all applicants who registered in the application. They can also view the applicants' CVs.

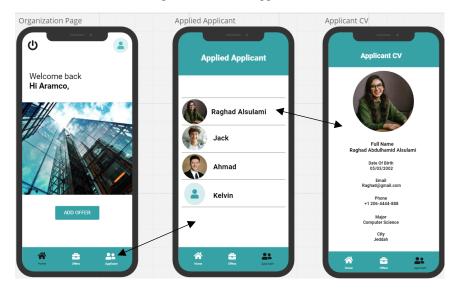


Figure 10: View All Applicants

UX flowchart

User Launches App Show Splash Screen Display Welcome Message Register Register Log In Enter Details Enter Credentials Success Validate Credentials Failur Display Error Message Successful Registration Display Error Message Successful Log In Display Role Selection (Applicant/Organization) Display Role Selection (Applicant/Organization) Yes Applicant Organization Display Applicant Home Page Display Organization Home Page Display Organization Home Page Display Applicant Home Page Options:
- Create CV
- View Companies & Offers
- Search Offers
- Recommended Offers
- Applied Offers
- Logout (Back to Login) Options:
- Create Company Profile
- Add Offers
- View Offers
- View Applicants
- Logout (Back to Login) Options:
- Create CV
- View Companies & Offers
- Search Offers
- Recommended Offers
- Applied Offers
- Logout (Back to Login) Options: - Create Company Profile - Add Offers - View Offers - View Applicants - Logout (Back to Login)

Figure 11: Flowchart

The Defined "happy path" for my application represents the ideal and seamless user steps where everything functions as expected without encountering any errors or complications. In this scenario, a user starts by logging into the application, and upon successful login, they are prompted to select their role, either as an Applicant or an Organization. Once the role is selected, the user is directed to their respective home page, where they can access a range of features tailored to their needs.

For Applicants, the home page provides options such as creating a CV, viewing available companies and offers, searching for specific offers, viewing recommended offers based on their profile, viewing applied offers, and logging out when done. On the other hand, Organizations have access to features like creating a company profile, adding training offers, viewing added offers, viewing applicants who have applied to their offers, and logging out.

Throughout this steps, the user experiences a smooth and intuitive interface, with clear navigation options and a user-friendly design. The flowchart representing the "happy path" ensures that users can easily accomplish their tasks and goals within the application without encountering any hurdles, leading to a positive and satisfying user experience.

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.

References:

1- A. S. for P. Affairs, "Prototyping," Feb. 19, 2014. https://www.usability.gov/how-to and-tools/methods/prototyping.html (accessed Nov. 20, 2021).