Deliverable: Phase 2 (Analysis)

USER PERSONAS:

PICTURE & NAME	DETAILS	GOAL
Name: Darren Law	Common Citizen **Age:** 58 years old **Gender:** Male **Occupation:** Retired school teacher **Technological Proficiency:** Basic computer skills, owns a smartphone but uses it primarily for calls and texting. **Lifestyle and Attitude:** Leads a community-centered life, valuing independence, social connections, and a resilient, positive outlook despite limited tech proficiency	Darren's primary goal is to maintain his independence while staying connected with the local community, seeking assistance when needed, and embracing a fulfilling, active lifestyle. Darren's goal is to use the application as a convenient and accessible tool to request assistance for tasks that have become challenging due to aging while ensuring her privacy and security online.
Name: Samantha Stiltner	Common Citizen **Age:** 34 years old **Gender:** Female **Occupation:** Marketing Manager at a medium-sized tech company **Technological Proficiency:** Proficient in using smartphones, apps, and online tools for work but prefers simplicity and efficiency. **Lifestyle and Attitude:** A working mother who leads a fast-paced life, valuing	Samantha's primary goal is to achieve a better work-life balance by optimizing her daily tasks and providing a supportive and enriching environment for her family in their community. Samantha's goal is to have a reliable and user-friendly tool that simplifies her life by efficiently connecting her with local services, helping her save time, and occasionally offering

	efficiency in her daily routines and cherishing moments with her family. She balances her demanding career with resilience and embraces new experiences in her community.	opportunities for family-friendly activities within her community.
Name: Campus Cookies	**Size:** Small sized with approximately 20 employees **Industry:** Baking Company **Location:** Blacksburg **Annual Revenue:** $2 million	The local business aims to increase its visibility within the community, engage with locals, and provide services to the people of local communities. The local business's goal is to seek spontaneous help to accomplish a few tasks.
Name: Mighty Vineeth	Student **Age:** 26 years old **Gender:** Male **Major:** Computer Science **Technological Proficiency:** He is well-versed in programming languages, software development, and digital tools commonly used in his field. **Lifestyle and Attitude:** Vineeth, a PHD computer science student at Virginia Tech, leads a dynamic lifestyle, balancing intensive coursework with active participation in community service activities. His attitude is marked by ambition, curiosity, community engagement, and a clear focus on his future career in technology.	Mighty Vineeth's goal is to have an easily accessible and secure application to actively engage in tech-related community service opportunities and connect with like-minded individuals to collaborate on projects that benefit his local community.

USER STORIES:

1) As a community member who needs assistance with household chores,
     I want to post a service job specifying the tasks I need help with,
     So that I can find a Virginia Tech student willing to assist me with these tasks.

2) As a Virginia Tech student who wants to earn extra income,
     I want to browse available service jobs in my locality,
     So that I can choose jobs that match my skills and schedule.

3) As a non-profit organization,
     I want to list community service opportunities on the platform,
     So that I can attract Virginia Tech students interested in volunteering for social causes.

4) As a Virginia Tech student who wants to do community service,
     I want to browse available service jobs in my locality,
     So that I can choose jobs that I wish to volunteer for.

5) As a local business owner,
     I want to post job opportunities or part-time work for Virginia Tech students,
     So that I can find temporary help for my business needs.

6) As a user who has booked a service job,
     I want to view the contact information of the job poster,
     So that I can communicate with them regarding job details.

7) As a job poster,
     I want to view the profile of the student who has picked up my job,
     So that I can verify their credentials and skills.

8) As a user,
     I want to view the ratings and reviews of service providers,
     So that I can make informed decisions when selecting a student for a job.

9) As a student,
     I want to propose alternative availability for a job I want to pick up,
     So that I can accommodate my schedule and still contribute to the community.

10) As a user,
     I want to receive reminders about upcoming service job appointments,
     So that I don't miss any scheduled tasks.

11) As a user,
     I want to have the option to report inappropriate content or behavior on the platform,
     So that the community remains safe and respectful.

12) As a user,
     I want to set my preferred notification preferences (e.g., email, push notifications),
     So that I can control how I receive updates and messages from the platform.

USE CASES:

CASUAL USE CASES:

Use Case Name: Registering a New User
Success Scenario:
Users interested in accessing the services provided by "Hokie for U," initiates the registration process. The system should process the user's registration request, validate the information, and upon successful registration, should send a confirmation email to the user's provided email address. User receives the email, clicks on the confirmation link, and the account is verified, allowing the user to login and start using the application features.
Alternative Scenario:
1. If a user attempts to register with an email address that is already associated with an existing account, the system should detect the conflict and display an error message.
2. If a user submits the registration form with one or more mandatory fields left empty, the system should recognize this and display an error message.

Use Case Name: User Login
Success Scenario:
An existing user of the "Hokie for U" platform, wishes to access the account. The user visits the platform's login page and enters the registered email address and password. The system should validate the credentials, and upon successful authentication, should grant access to the account. Users should then be redirected to the personalized dashboard, where they can view recent and upcoming service jobs.
Alternative Scenario:
1. If a user enters incorrect login credentials (e.g., a mistyped email or password), the application should detect the error and display an error message.
2. Suppose a user attempts to log in with incorrect credentials multiple times, exceeding a predefined limit (e.g., three unsuccessful attempts). In that case, the application must lock the account temporarily for security reasons. Users should be notified that the account is temporarily locked and is provided with instructions on how to unlock it, such as resetting the password.

Use Case Name: Posting a service job.
Success Scenario:
User of the "Hokie for U" platform, wants to post a service job to seek assistance. User begins by logging into the account and navigating to the job posting page. User enters the job details. User ensures that all required fields are filled and clicks the "Post Job" button. The system validates the

inputs, confirms the successful creation of the job listing, and redirects users to the job's details page, where they can view the newly posted job.

Alternative scenario:
1. If a user attempts to post a job but leaves one or more mandatory fields empty, the system detects this and displays an error message.
2. Suppose the user tries to post a job with the same title and description that they have previously posted. In that case, the system recognizes the duplicate and prevents the user from creating another identical job listing.

FULLY DRESSED USE CASE:

Use Case Name: Post a Service Job
Primary Actor: User (Blacksburg local communities / Non-profit organizations / Local businesses)
Description: Users can post a new service job listing on the platform, providing necessary job details for potential candidates to view and apply.
Secondary Actor: System
Stakeholders and Interests: Local Residents / Non-profit organizations / Local Businesses: Users are interested in finding suitable candidates for the jobs they post.
Preconditions:
Users are registered and authenticated in the application.
Main Success Scenario:
1. Users log in securely to their account.
2. User navigates to the "Post a Job" page within the application.
3. User enters job details, including:
   Title: A concise and descriptive title for the job.
   Description: A detailed description of the job, including responsibilities and requirements.
   Category: The category or type of service job
   Location: The location where the job is to be performed.
4. The system creates a new job listing in the database.
5. The system redirects the user to the job's details page, where they can view the newly posted job listing.

Extensions:
Step 3a: If the user leaves any mandatory fields empty or provides invalid data during job posting then the system displays error messages indicating the specific issues.
Step 4a: After posting a job, the user realizes that some job details need to be modified or updated. User makes necessary edits or updates to the job title, description, category, or location and submit. The system should update the job listing with the edited information.
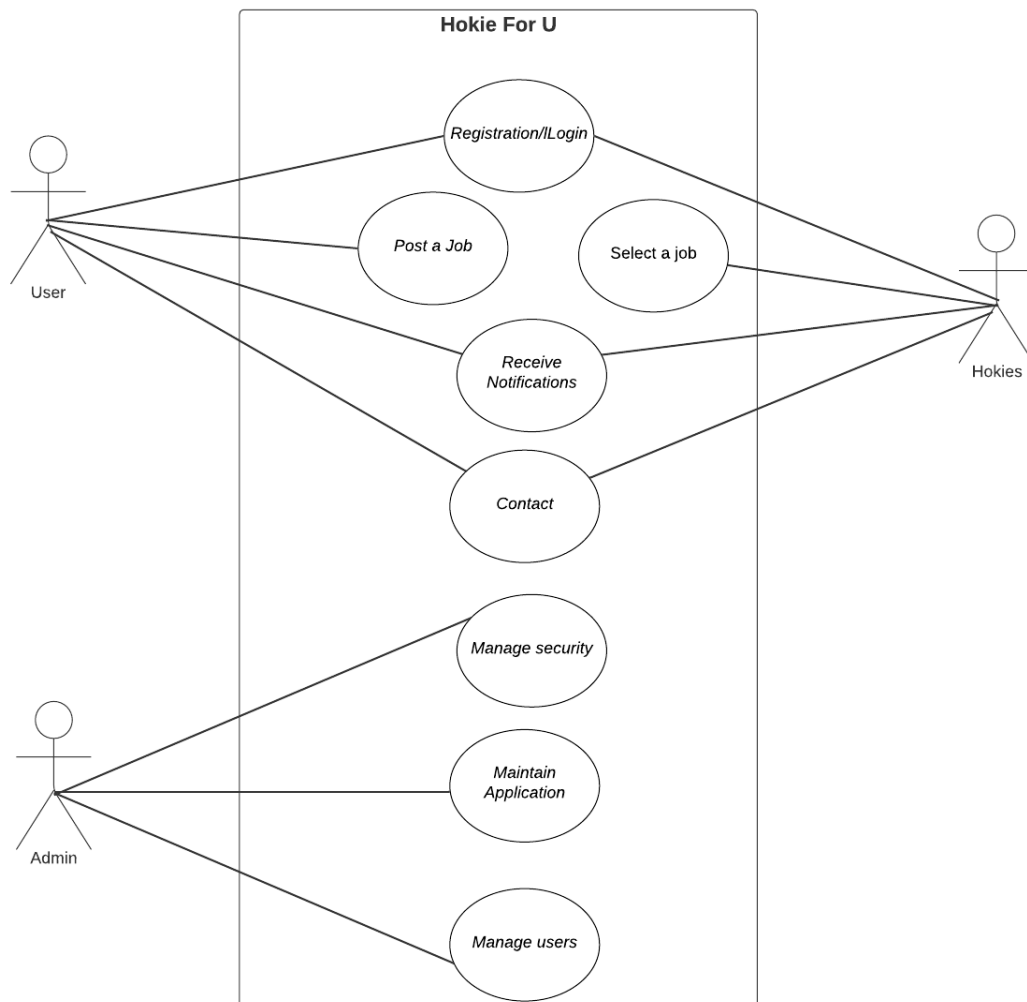
Postconditions:
  1. A new job listing is created and added to the platform's database.
  2. The job listing is visible to other users who browse available service jobs.
  3. The user is redirected to the job's details page to view the newly posted job.

Special Requirements:
  1. The system should support the ability to attach images or files related to the job posting if necessary (e.g., photos of items to be picked up).
  2. The platform should have a user-friendly interface for job posting, making it easy for users to provide accurate and detailed information.

USE CASE DIAGRAM:

Finalized Version of Use Case Diagram

SCRUM:

PRODUCT BACKLOG:

ID	User Story	Estimation	Priority
1.	As a user, I want to register and login securely using authentication methods.	5	1
2.	As a product manager, I want a database schema for user profiles, including personal information and profile pictures.	3	2
3.	As a user, I want the ability to post service jobs and store their details in the system.	8	3
4.	As a user, I want to schedule service jobs, specifying date and time preferences.	13	4
5.	As a product manager, I need a data model for service job postings, covering attributes like title, description, category, and location.	3	5
6.	As a user, I want a user dashboard that provides an overview of my most recent and upcoming jobs.	8	6
7.	As a user, I want to receive notifications when a service job is booked or scheduled.	5	7
8.	As a user, I want to browse and view a list of available service jobs based on my preferences and filters.	5	8

LIST OF TESTS TO BE PERFORMED:

After completing the implementation of our user stories, our next crucial step involves ensuring the application's reliability and robustness. This testing process, like unit testing, aims to thoroughly examine all fundamental functionalities, verifying the smooth operation of the application. Our objective is to detect and resolve any issues prior to deployment. These tests follow our Definition of Done (DoD) criteria, guaranteeing that each user story meets its functionality and quality standards. By diligently following this rigorous testing process, we uphold our commitment to delivering a high-quality and fully functional application.

User Story 1: User Registration and Login
1. User registration form is implemented.
2. Secure authentication methods are integrated (e.g., password hashing).
3. Users can successfully register with valid information.
4. Users can securely log in with their registered credentials.
5. Appropriate error messages are displayed for registration and login failures.

User Story 2: Database Schema for User Profiles
1. Database schema for user profiles is designed and implemented.
2. User profiles can store personal information (e.g., name, contact information).
3. User profiles can store profile pictures.
4. Data validation ensures the integrity and accuracy of stored information.

User Story 3: Post Service Jobs
1. Users can create service job postings.
2. Job details, including title and description, are stored in the database.
3. Users can edit and update their posted service job details.
4. Proper validation ensures the completeness of job postings.

User Story 4: Schedule Service Jobs
1. Users can schedule service jobs with date and time preferences.
2. Scheduling system checks for availability of date and time slots.
3. Users can reschedule service jobs as needed.
4. Confirmation messages are displayed upon successful scheduling or rescheduling.

User Story 5: Data Model for Service Job Postings
1. Data model for service job postings is designed and implemented.
2. Attributes like title, description, category, and location are included.
3. Data validation ensures consistency and completeness of job postings.
4. Data model can handle future updates and additional attributes.

User Story 6: User Dashboard
1. User dashboard is created to provide an overview of recent and upcoming jobs.
2. Dashboard displays a list of recent service jobs.
3. Dashboard displays a list of upcoming service jobs.
4. User experience is considered for dashboard design and usability.

User Story 7: Notifications for Service Jobs
1. Users receive notifications when a service job is booked or scheduled.
2. Notification delivery methods are implemented (e.g., email, push notifications).
3. Notifications include relevant job details and scheduling information.
4. Users can opt-in/opt-out of notification preferences.

User Story 8: Browse and Filter Service Jobs
1. Users can browse and view a list of available service jobs.
2. Filters and preferences allow users to narrow down job listings.
3. Search functionality allows users to find specific job categories or locations.
4. Pagination or infinite scrolling is implemented for browsing large job listings.

PRODUCT ROADMAP:

For **Sprint 1**, we will work on the basic functionalities like login, user registration and database creation. Also, we will start working on one main feature which is the capability to post jobs to the application. Below are the user stories we will be addressing:
1. As a user, I want to register and login securely using authentication methods.
2. As a product manager, I want a database schema for user profiles, including personal information and profile pictures.
3. As a product manager, I need a data model for service job postings, covering attributes like title, description, category, and location.
4. As a user, I want the ability to post service jobs and store their details in the system.

For **Sprint 2**, we will focus on major features like posting jobs/services, browsing jobs, and scheduling the jobs. Below are the user stories we will be addressing:
1. As a user, I want the ability to post service jobs and store their details in the system.
2. As a user, I want to browse and view a list of available service jobs based on my preferences and filters.
3. As a user, I want to schedule service jobs, specifying date and time preferences.

For **Sprint 3**, we will work on some additional features like notifications and dashboard to enhance user experience. Below are the user stories we will be addressing:
1. As a user, I want a user dashboard that provides an overview of my most recent and upcoming jobs.
2. As a user, I want to receive notifications when a service job is booked or scheduled.

GITHUB SETUP:

Added readme with Project description and also added files to the repo
Source: https://github.com/sivakumarreddy07/Hokie-For-U