Hokie For U

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ACM Reference Format:

1 PROBLEM STATEMENT

In today's fast-paced world, People depend on a variety of local services to meet their everyday needs. However, people have difficulty finding accessible and reliable services in their locality. Customers often express concerns about the quality and reliability of service providers. Inorder to address these challenges, we propose a comprehensive services application - Hokie For U that seeks to resolve concerns while finding and connecting the service seekers with Virginia Tech students

2 PROJECT DESCRIPTION

Hokies excel in a lot of aspects in life, this application will let Hokies help our neighborhood communities in providing services. These services can be anything from household chores, babysitting, grocery pickup to tutoring. This application indirectly helps hokies find a job as well as contribute to the betterment of neighborhood communities.

With a user-friendly interface, we connect hokies with surrounding communities. Any person in the community can post a job to the Hokie for U application, this job can be picked by hokies who are willing to help and possess the skills. The application provides a contact feature that helps people connect and discuss anything related to these jobs.

On a high-level the application includes the following main features: Users may order services at their convenience, specify their needs, and receive confirmation and updates with the help of the app's integrated booking and scheduling system. Users can also rate the service providers. For scheduled service visits, users receive notifications and reminders, guaranteeing a smooth and on-time experience.

3 PROJECT OUTCOMES OR DELIVERABLES OR FINAL GOALS (TENTATIVE)

The main goal of the project is provide a platform for people to contribute to the community. Main deliverables of the app would be a feature to post jobs, booking and scheduling of the jobs, rating, notifications, contact and customer support.

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4 PROJECT TEAM MEMBERS AND THEIR ROLES

Akshay Reddy Narra - Developer and QA Charan Teja Chelle - Scrum Master and QA Samhitha Pentaparthy - Developer Siva Kumar Reddy Sangu - Developer Siva Sagar Kolichana - UI/UX Designer Sushma Kumari Kakarla - Product Manager

5 ASSUMPTIONS AND RISKS

User Acceptance: It is assumed that introduction of a new service platform will be well-received by neighborhood communities and hokies and they would use it for future community service activities.

Collaboration with local communities: It is assumed that both the hokies and local communities will be ready to incorporate the use of Hokie for U app in their day to day lives.

Scalability Risk: The application may not be able to grow effectively to handle more users is a concern. If many people start using the app, it might become slow or even crash because it can't handle the increased demand. (considering volunteers apart from hokies).

Calendar integration: While working with booking and scheduling, we might face difficulties integrating the user's personal calendar with the application due to differences in calendar formats and APIs. For instance, Google Calendar may use a different date-time format than Outlook. These differences can lead to inconsistencies when trying to sync or display events accurately across platforms.

Other General Application Risks:

The app's policies and practices may need to be updated and modified on a regular basis due to changing data privacy laws.

User belief in the app's rating system might be damaged by manipulated or fraudulent reviews and ratings.

6 TIMELINE FOR COMPLETION

Week number and date	Topic	
Week3 (Sep 04)	Project Initiation	
Week4 (Sep 11)	Team Collaboration and Scrum Initiation	
Week5 (Sep 18)	Requirement Gathering	
Week6 (Sep 25)	Project Analysis and Use Cases	
Week7 (Oct 02)	Designing (UI, Wireframes etc)	
Week8 (Oct 09)	Sprint 1 Initiation	
Week9 (Oct 16)	Continue working on Sprint 1	
Week10 (Oct 23)	Sprint 2 Initiation post Sprint 1 deliverables	
Week11 (Oct 30)	Continue working on Sprint 2	
Week12 (Nov 06)	Sprint 3 Initiation post Sprint 2 deliverables	
Week13 (Nov 13)	Continue working on Sprint 3	
Week15 (Nov 27)	Sprint 3 deliverables and Final Presentation	
Week16 (Dec 04)	Documentation and Final Project Submission	

Hokie For U

7 TEAM COMMUNICATION PLAN

The team will be collaborating on Microsoft teams. We will be attending a 30 min weekly discussion call on Thursdays for work assignments and to address any issues. We will be tracking the progress of the tasks using Sprint boards and will maintain the code base repository on Github. At the end of every sprint, we will be having a meeting for peer reviews and feedback.

8 NEED FOR THIS SYSTEM

Numerous students express a desire to engage in community service and make a positive impact on social issues. Our platform simplifies the process of finding and participating in community service opportunities for students. By restricting access to Virginia Tech students, we enhance the precision and effectiveness of matching students with suitable opportunities. This approach increases the likelihood of student interest, ultimately saving time and effort for both organizations and students. Our application bridges the gap between Virginia Tech students who want to volunteer or work in community service roles and local organizations seeking enthusiastic volunteers.

Examples: Websites like Handshake or even general job boards often have job listings. Criticism:

- (1) Because these platforms are not designed for students or community service, the filtering choices may be inadequate for such opportunities.
- (2) It's worth noting that the existing system primarily focuses on job listings with longer durations and is not tailored to community service positions, which are typically short-term and oriented toward volunteer work.
- (3) The current systems only provide descriptions of the job and application links, they do not provide contact and scheduling features that are offered by our application.

9 STAKEHOLDER ANALYSIS

Stakeholder register:

Local Residents
Local Businesses
VT Students
IT Team
Non-profit organizations
Volunteers (Non-VT)

Stakeholder Matrix:

NAME	ROLE	GROUP	EXCEPTATIONS	CONTACT INFORMATION	INFLUENCE
Rashmi	Local Resident	External	Able to post the		
			job to get help	rashmi@gmail.com	Medium
XYZ Store	Local businesses	External	Able to post the		
			job to get help	xyzstore@gmail.com	Low
Vamsi	VT Students	External	Able to pick a job posted		
			by the job poster	vamsi@vt.edu	Medium
Akshay	IT Team	Internal	System Developer	akshay@gmail.com	High
Siva	Admin	Internal	Maintenance	Shiva@gmail.com	High
			People apart from		
			VT students		
Volunteers	Non VT Students	External	volunteering to help	volunteer@gmail.com	Low
			local communities		

Power and Interest Grid:

	POWER	INTEREST
Local Residents	High	High
Local Businesses	High	High
VT Students	Low	High
IT Team	Medium	Medium
Non-Profit Organizations	Low	Low
Volunteers	Low	Low

10 TEAM DYNAMICS

- 1) What skills do your team members bring to this project?
 - Team leading and project management skills (using software engineering concepts and tools to effectively track the progress of the project).
 - Hands-on experience with Repository Management and CI/CD tools (preferably Github) to effectively maintain the code.
 - Almost all teammates have working experience (a few with front-end and a few with back-end
 applications) in tech companies, which lets us develop clean code by following architecture
 and design principles, avoiding obsolete libraries, and organizing better codebase.
 - Good understanding of Object Oriented concepts, Data Structures, and Algorithms to implement complex functionalities with sheer efficiency
 - Good knowledge of developing database scripts, which we will utilize to integrate the database with our website.
 - Good Communication to collaborate productively and present our project with high-quality.
- 2) What skills are missing and you'll need to learn to deliver the system?
 - The team has experience with HTML/CSS to develop the UI, but to build a more sophisticated system we will be learning Node JS to implement the front end of the application.
- 3) How are you planning to obtain such missing skills?
 - Team members will be learning Node JS using various online courses and implementing it effectively to develop the front end of the application.