

**Prairie**

**View**

**A&M**

**University**

**PV Settle**

*Prepared by*

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**ABSTRACT**

International students face many challenges when adjusting to a new nation and culture and have numerous difficulties, particularly in the social and academic domains. This technical report explores the difficulties faced by newly enrolled international students at Prairie View A&M University (PVAMU) and presents a solution called PV Settle that aims to address these challenges by creating a welcoming and supportive environment that facilitates a smoother transition for international students. PV Settle is an intuitive community-driven web application designed to support international students in their transition by providing an integrated platform that connects them to the PVAMU community. The application offers a range of features that provides useful information about the day-to-day needs of international students. This includes aggregated selection of accommodation rental options, features to help students connect with each other, including chat rooms, discussion forums, a prioritized list of tasks designed to facilitate seamless integration, and innovative transportation solutions within the PV community. The application has the potential to make a significant difference in the lives of international students at Prairie View A&M University by helping them to adjust to their new surroundings and to succeed in their academic and social endeavors.

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Cover and Title – use the template provided

• Project Abstract - The abstract is a concise summary of the report.

• Table of Contents – see the example provided

• List of Figures – see the example provided

• List of Tables – see the example provided

• Body of the Report – this may vary somewhat among teams

**CHAPTER 1**

**INTRODUCTION**

**1.1 Background**

A significant and increasing percentage of Prairie View A&M University's students consists of international students. These students, who represent a wide range of nations and cultures, enrich the university community in tangible ways with their rich diversity and life experiences. However, international students also face major hurdles transitioning and adjusting to to a new country and culture as well as the school's academic and social system facing problems like: lack of access to lodging options before leaving their home country, inadequate knowledge about campus transportation infrastructure and insufficient knowledge or access to information about important activities such as opening bank accounts, obtaining social security number (SSN), best suited phone plans for students, etc. These challenges have the potential to significantly impact their initial experiences settling in, making it more difficult to integrate into the university community. There have been instances of passive aggression to students temporarily squatting with friends and colleagues

**1.2 Problem Statement**

The lack of a comprehensive support system tailored specifically to meet the needs of international students is a critical challenge in the PVAMU academic community. This is further worsened by the absence of readily available and relevant information, which makes their transition into university life unnecessarily difficult making these students more likely to experience social problems, such as isolation, stress and loneliness. Even though there’s no easy solution to addressing this complex problem, there is a pressing-need for an efficient, intuitive and user-friendly solution that can bridge the information gap and provide timely information that is all-encompassing about everyday essentials and lifestyle adjustments. The solution developed to tackle this should feature insights into appropriate housing possibilities, simplification of tasks related to essential documents like social security numbers and bank account creation, and real-time information on transportation solutions within the PVAMU community.

Addressing this problem to meet the unique problems of international students is imperative to foster a more inclusive and supportive environment.

**1.3 Project Goal**

The goal of this project is to improve the transition and integration experience of new international students in PVAMU by creating an intuitive, user-friendly solution that provides them with a comprehensive and accessible source of information and support. The solution aims to bridge the information gap by providing an all-in-one platform for

**1.4 Project Objectives**

The project goals will be implemented by implementing the following objectives

***Develop a Responsive Web-based Application*** - Creation and development of PV Settle web application to be responsive, intuitive and user-friendly making it easy to access on mobile and web

**1.5 Team Members and Primary Task Assignments**

The team is comprised of four members assigned with the following tasks and responsibilities:

| **S/N** | **Team Member** | **Designation** | **Expertise** |
| --- | --- | --- | --- |
| 1 | George Ekechukwu | Scrum Master | Problem Solving, SQL, C++, PHP  Communication Skills, Python, |
| 2 | Pratyush Srivastava | Backend Developer | Python, HTML, CSS, SQL, PHP, C++, Security |
| 3 | Oluwayemisi Alabi | Frontend and UI Designer | HTML, CSS, UI/UX, Prototyping, Product Management |
| 4 | Chinagolum Osasah | Product Manager | Product Management, Backlog Refinement, Creation of User-Stories |

**▪ Project Goals and Objectives**

**▪ Team Members & primary task assignments**

o Chapter 2 –

**Survey of Existing work – overview of existing software similar or related to the project**

o Chapter 3 - System Requirements

**▪ Functional Requirements**

**• General functional description of the system**

**• use-case diagram(s) and**

Catalog of user stories

|  | **Epic - Create an engaging, user-friendly landing page to effectively onboard international students to the PV Settle website.** |
| --- | --- |
| 1 | As an international student accessing the website, I want an easy-to-navigate landing page interface so that I can quickly find the information I need when first visiting the site. |
| 2 | As an international student, I want a simple, intuitive navigation menu on the landing page so that I can quickly access the most important pages and find what I need efficiently. |
| 3 | As an international student, I want the key sections and calls-to-action to be clearly visible on the landing page so that I know what actions I need to take when visiting the site and quickly find the most relevant information. |
| 4 | As an international student, I want the landing page layout to feel welcoming and inclusive so that I am eager to sign up and engage with the platform, feeling like it is designed for students like me. |
|  | **Epic - Develop modular, containerized components to facilitate flexibility and reusability on the PV Settle website.** |
| 1 | As an international student, I want fast loading website pages so that I can use the site smoothly without interruption and quickly find what I need. |
| 2 | As an international student, I want the website layout and menu to be consistent even when new content is added, so I don't get confused while surfing the website and can easily navigate to find what I need. |
|  | **Epic – Implement temporary login functionality to grant initial access while the full login system is in development.** |
| 1 | As an international student, I want to be able to create an account with my school email so I can log into the PV Settle website and access the services. |
| 2 | As an international student, I want to be able to log in with my school email so I can access the features on the PV settle website that are tailored to me as a user. |
|  | **Epic - Create a comprehensive transportation section on the PV Settle website outlining PV Shuttle bus routes, schedules, and key details to help international students easily navigate campus and town.** |
| 1 | As an international student accessing the transportation section of the PV Settle website, I want to see a clean, modern design with intuitive navigation so I can easily find the information I need about shuttle routes, schedules, and fares. |
| 2 | As an international student accessing the transportation section of PV Settle website, I want to see a map of the PV Shuttle routes so that I can understand where the buses travel on campus and in town, making it easy to identify the relevant routes. |
| 3 | As an international student accessing the transportation section of PV Settle website, I want to view the schedules for each PV Shuttle route so that I can plan my transit time accordingly and easily know when the buses are running. |
| 4 | As an international student accessing the transportation hub of PV settle website, I want to see the locations of all PV Shuttle stops so I know where to catch the bus and can easily access the transit service. |
| 5 | As an international student accessing the transportation hub of PV settle website, I want to see the days and hours of operation so I know when PV Shuttle service is available and can plan to use it during the operational times. |
| 6 | As an international student accessing the transportation hub of PV settle website, I want to see the costs to ride the PV Shuttle so I can be prepared to pay the fare for select location and have the correct payment ready when boarding. |
|  | **Epic - Develop an informative housing hub on the PV Settle website to provide international students guidance on finding accommodations when relocating to study in PVAMU.** |
| 1 | As an international student accessing the housing hub on the PV Settle website, I want to see listings of available rentals so I can view housing options in my price range near campus. |
| 2 | As an international student accessing the housing hub on the PV Settle website, I want to see details like amenities for each listing so I can evaluate if the accommodations meet my needs. |
| 3 | As an international student accessing the housing hub on the PV Settle website, I want to see landlord policies and reviews for each listing so I can evaluate if the accommodations meet my needs before reaching out to the landlord. |
|  | **Epic - Implement map functionality to show shuttle bus routes on the PV Settle website.** |
| 1 | As an international student, I want to view an interactive map of the shuttle bus routes on the PV Settle website so I can plan how to navigate the university using the PV shuttle system. |
| 2 | As an international student, I want to be able to toggle the different shuttle bus routes on the map so I can see which routes service the locations I need to go to. |
| 3 | As an international student, I want to be able to zoom in on the map to view schedule and route details so I know when I can catch the shuttle. |
|  | **Epic - Create an engaging, easy to navigate information hub on the PV Settle website to provide international students guidance on essential tasks when relocating to study in PVAMU.** |
| 1 | As an international student accessing the PV settle website, I want the information hub organized by clear categories so that I can quickly find the specific guidance I need, making it easy to locate the most relevant information. |
| 2 | As an international student accessing the PV settle website, I want step-by-step instructions for obtaining a social security number so that I can seamlessly navigate the process and succeed in getting this essential ID. |
| 3 | As an international student accessing the PV Settle website, I want step-by-step instructions for obtaining a phone number so that I can smoothly go through the steps and get connected with phone service when I arrive. |
| 4 | As an international student accessing the PV settle website, I want step-by-step instructions for tasks like opening a bank account so that I can easily complete it without confusion, making the process smooth and straightforward. |
| 5 | As an international student accessing the PV settle website, I want to see a checklist of required documents for each task so that I can be fully prepared by having all necessary paperwork ready ahead of time |
| 6 | As an international student accessing the PV settle website, I want step-by-step instructions for tasks like opening a bank account so that I can easily complete it without confusion, making the process smooth and straightforward |
| 7 | As an international student accessing the PV settle website, I want to see a checklist of required documents for each task so that I can be fully prepared by having all necessary paperwork ready ahead of time |
|  | **Epic - Create a user-friendly student dashboard on the PV Settle website to guide international students in tracking essential tasks.** |
| 1 | As an international student, I want to see a checklist of important tasks to complete on the PV Settle site, so I know what steps I need to take to settle into the university. |
| 2 | As an international student, I want to be able to mark tasks as complete and see my overall progress on the PV Settle site, so I can track how much I still need to do. |
| 3 | As an international student, I want to be provided resources for each task on the PV Settle site, so I can easily access information on how to complete them. |
| 4 | As an international student, I want to receive reminders and notifications on the PV Settle site when deadlines are approaching, so I don't miss important dates and requirements. |
|  | **Epic - Develop an academic section on the PV Settle website that connects to Prairie View A&M university systems for course registration, class schedules, grades, bill payments etc.** |
| 5 | As an international student, I want to view and search for courses and create my class schedule for the upcoming semester so I can register for the right classes. |
| 6 | As an international student, I want to view my weekly class schedule, room assignments, and professor details so I know when and where my classes meet. |
| 7 | As an international student, I want to check my grades for courses and monitor my academic progress so I can ensure I am meeting program requirements. |
| 8 | As an international student, I want to make tuition and fee payments online via the website so I can more easily pay my university bills. |
|  | **Epic - Develop a comprehensive FAQ section on the website to address common questions from international students settling into Prairie View A&M University.** |
| 1 | As an international student, I want to search or browse FAQs so I can find answers to my questions about transitioning to life at the university. |
| 2 | As an international student, I want the FAQ page to be visually well-organized with clear formatting, so it is easy to scan and find the information I need quickly. |
| 3 | As an international student, I want to view FAQs organized by meaningful categories like housing, transportation, and academics, etc. so I can easily find relevant information. |
|  | **Epic - Create an engaging community hub on the website to connect international students and enable peer support.** |
| 1 | As an international student, I want the community hub to have an easy to navigate layout with sections clearly organized by nationality, e.g., Nigeria, India etc., so I can quickly find and connect with peers from my home country. |
| 2 | As an international student from Nigeria, I want there to be a Nigeria student section in the community hub that is branded with Nigeria colors and design motifs, so that I feel welcomed connecting with other Nigerian students. |
| 3 | As an international student, I want each nationality section to showcase important cultural events and holidays, so I don't miss out on key dates. |

**▪ Non-Functional Requirements**

o Chapter 4 - **Development Environment – hardware & software**

o Chapter 5 - **System Design**

**▪ System Architecture**