# Progress Report: <App Name>

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| Team Name: Singhs | Date: 25/Nov. 2024 |
| Team Members: Shubhampreet Singh  Deepak Sharma  Jaskaran Singh Gill  Pryanshu Lal  Jashanpreet Singh | Reporting Period: 24/ Nov./ 5:00pm |

## Introduction

As part of your ongoing project to develop a mobile application, you are required to submit a progress report at the end of each phase of the project. This report should summarize the work you have complete so far, the progress towards meeting the project goals, and identify any challenges your team has encountered.

## Instructions

1. Use the templates below as thought starters for your progress report.
2. Submit this progress report with your work at each stage of the project.
3. Only one submission per team is required.

A screenshot of a calculator

Description automatically generated

## Phase 3 – User Interface Mock-Up

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| **Highlights and Accomplishments** | What major tasks that have been completed in this phase of the project?   1. **Prototype Completion:**  * **Basic Calculator:** Implemented intuitive layout of basic arithmetic operation, implemented percentage and parenthesis functions. * **Scientific Calculator:** Implemented an advanced functionality like trigonometric operations, exponents, memory storage. * **Graphing Functionality:** Completed in an interactive graphing with axes that are changeable and functions plotted on it in real time. * **Unit Converter:** Designed dropdown menus and interface responsiveness for the various measurement units' conversion. * **Accessibility Features:** Incorporated feedback, ensuring accessibility by using large buttons, clear labelling, and responsiveness in all the modules.   **2.User Flow Documentation**   * wrote down the clear user flows for navigation without any confusion between the different modules like Basic Calculator, Scientific Calculator, Graphing, and Unit Converter. * Gave input-output interaction to keep the users interacting smoothly. * Critical decision paths were underlined for ease in smoother user navigation.   **3.Technical Specifications**   * Technology Stack: React, C# for cross-platform development. * Platform Compatibility: Compatible with both Android and iOS responsive design. * Storage: Temporary data caching for computations and conversions.   **4.Improving Usability and Accessibility**   * Developed large buttons, clear fonts, and consistent layouts throughout the modules. * Added color contrast for accessibility, and responsive design. * Implemented feedback that ensures diverse user groups can utilize it. |
| **Challenges and Issues** | What challenges, issues, or obstacles did you encounter and how did you overcome them?  **Design Consistency:**   * Problem: The design language will be consistently the same across various modules. * Solution: A design consistent in language that features the exact buttons, color schemes, and layout.   **Graphing Interactivity:**   * Problem: Plotting a function involves real-time responses. * Solution: Optimizing algorithms used to plot graphs by reducing rendering delays.   **Unit Conversion Data:**   * Problem: Unit types and their conversion factors are categorized differently. * Solution: An open-source library is used for complete and accurate conversions.   **Cross-Module Integration:**   * Problem: Seamless navigation across various modules. * Solution: Co-designed very detailed User Flow Diagrams and developed a modular architecture. |
| **Individual Contributions** | What did each member of the team work on in this phase of the project?  **Individual Contributions**  **1.Pryanshu Lal:**   * Designed the interface for a basic calculator. * Flow diagrams were drawn out for users.   **2.Shubhampreet Singh:**   * Made scientific calculator module that provides very useful functions in mathematics. * Placed the buttons for easy manipulation.   **3.Deepak Sharma:**  • Engineered graphing capabilities that allow for real-time engagement and adjustable axes.  • Improved user experience with tooltips and graph annotations.  **4.Jaskaran Singh Gill:**   * Unit Converter prototype finished. * Accuracy in the unit conversion and response was ensured for the device.   **5.Jashanpreet Singh:**   * Gathered comments and worked on the accessibility of all modules. * Described the usability features and design idea behind every module in detail. |
| **Team Plan for Next Phase** | What do you plan on completing in the next phase of the project?  **Team Plan for Next Phase**  **1.Integration and Testing:**   * It knits all the stand-alone modules into a single integrated application. * Even more extensive user testing of the functionality, further enhancing usability.   **2.Performance Optimization:**   * Improved graphing speed when plotting functions. * Assuring performance on every different platform.   **3. Finalizing documentation:**   * Update usability guidelines. * Improvement in technical specifications. |
| **Individual Plan for Next Phase** | What do you plan on completing in the next phase of the project?  **Individual Plan for Next Phase:**  **1.Pryanshu Lal:**   * + Incorporate the basic calculator module in the main application skeleton.   + Easy transition from Basic Calculator   **2. Shubhampreet Singh:**   * + - Scientific Calculator testing and debugging.     - Complex computation with error handling.   **3. Deepak Sharma:**   * Improve graphing feature performance and increase user interactivity. * Cross-platform testing on various screens and devices.   **4. Jaskaran Singh Gill:**   * Unit Converter module testing * Complete the Dropdowns and improve User Input Validation   **5. Jashanpreet Singh:**   * Responsible for the end-to-end usability and accessibility in the integrated application. * Improved Documentation: Highlighted the elements of user-centred design and incorporated feedback. |