

**INTERNATIONAL SCHOOL**

**CAPSTONE PROJECT 1**

**CMU-SE 450**

**PROJECT PLAN DOCUMENT**

Version: 1.1

**SIMPLE CACULATOR – SC**

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Da Nang, 02/2025

**PROJECT INFORMATION**

|  |  |
| --- | --- |
| **Project Acronym** | SC |
| **Project Title** | Simple Caculator | | | |
| **Start Date** | 26 – Feb–2025 | **End Date** | 05 – Mar–2025 | |
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**PROJECT PLAN DOCUMENT**

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# 1. PROJECT DESCRIPTION

|  |  |  |  |
| --- | --- | --- | --- |
| **Project code** | SC | **Contract type** | Internal Project |
| **Customer** | N/A | **End-user** | User |
| **Project type** | Internal | **Project Manager/**  **Scrum Master** | Dang Van Nam |
| **Project category** | Simple caculator | **Business Domain** | AI |
| **Application type** | Software application |  |  |

***Table 1:*** *Project Description*

## This project aims to develop a simple calculator application, allowing users to perform basic arithmetic calculations such as addition, subtraction, multiplication, and division, as well as advanced calculations like exponentiation, square roots, and percentages. Additionally, the application will include functions for clearing, refreshing, and temporarily storing calculation history within the current session. The application will feature an intuitive and user-friendly interface, suitable for users of all skill levels.

## 2. DETAILED SCHEDULE

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Task Name** | **Duration** | **Start** | **Finish** | **Assign to** |
| **1** | **Initial** | **2 days** | **26/02/2025** | **27/02/2025** | **All members** |
| 1.1 | Project Kick-off Meeting | 1 hrs | 26/02/2025 | 26/02/2025 | All members |
| 1.2 | Discuss about project ideal | 2 hrs | 26/02/2025 | 26/02/2025 | All members |
| 1.3 | Create Proposal Document | 1 day | 27/02/2025 | 27/02/2025 | Khanh |
| 1.4 | Create Project Plan Document | 1 day | 27/02/2025 | 27/02/2025 | Nam |
| 1.5 | Create Product Backlog Document | 2 day | 27/02/2025 | 28/02/2025 | Vuong, Tu |
| 1.6 | Create User Story | 2 day | 27/02/2025 | 28/02/2025 | Kien |
| 1.7 | Review Document | 1 day | 27/02/2025 | 28/02/2025 | All members |
| **2** | **Requirement** | **1 day** | **29/02/2025** | **29/02/2025** | **All members** |
| 2.1 | Task assignment meeting | 2 hrs | 29/02/2025 | 29/02/2025 | All members |
| 2.2 | Design template | 1 day | 29/02/2025 | 29/02/2025 | Tu |
| 2.3 | Interview | 3 hrs | 29/02/2025 | 29/02/2025 | All members |
| **2.3** | **Write document** | **1 day** | **28/02/2025** | **28/02/2025** | **Khanh, Nam Kien, Vuong** |
| 2.3.1 | Functional | 1 day | 28/02/2025 | 28/02/2025 | Khanh, Nam |
| 2.3.2 | Non-Functional | 1 day | 28/02/2025 | 28/02/2025 | Kien, Vuong |
| **3** | **Design** | **1 day** | **01/03/2025** | **01/03/2025** | **All members** |
| 3.1 | Addition | 1 day | 01/03/2025 | 01/03/2025 | Nam |
| 3.2 | Subtraction | 1 day | 01/03/2025 | 01/03/2025 | Khanh |
| 3.3 | Multiplication | 1 day | 01/03/2025 | 01/03/2025 | Kien |
| 3.4 | division | 1 day | 01/03/2025 | 01/03/2025 | Vuong |
| 3.5 | exponentiation | 1 day | 01/03/2025 | 01/03/2025 | Tu |
| 3.6 | Square root | 1 day | 01/03/2025 | 01/03/2025 | Nam |
| 3.7 | percentages | 1 day | 01/03/2025 | 01/03/2025 | Tu |
| 3.8 | Backspace a character | 1 day | 01/03/2025 | 01/03/2025 | Khanh |
| 3.9 | Clear all | 1 day | 01/03/2025 | 01/03/2025 | Vuong |
| **4** | **Code** | **2 days** | **02/03/2025** | **03/03/2025** | **All Members** |
| 4.1 | Addition | 1 day | 02/03/2025 | 02/03/2025 | Kien |
| 4.2 | Subtraction | 1 day | 02/03/2025 | 02/03/2025 | Vuong |
| 4.3 | Multiplication | 1 day | 02/03/2025 | 02/03/2025 | Khanh |
| 4.4 | division | 1 day | 02/03/2025 | 02/03/2025 | Tu |
| 4.5 | exponentiation | 1 day | 02/03/2025 | 02/03/2025 | Nam |
| 4.6 | Square root | 1 day | 03/03/2025 | 03/03/2025 | Khanh |
| 4.7 | percentages | 1 day | 03/03/2025 | 03/03/2025 | Vuong |
| 4.8 | Backspace a character | 1 day | 03/03/2025 | 03/03/2025 | Nam |
| 4.9 | Clear all | 1 day | 03/03/2025 | 03/03/2025 | Tu |
| **5** | **Test** | **1 day** | **04/03/2025** | **04/03/2025** | **All members** |
| 5.1 | Addition | 1 day | 04/03/2025 | 04/03/2025 | Khanh |
| 5.2 | Subtraction | 1 day | 04/03/2025 | 04/03/2025 | Tu |
| 5.3 | Multiplication | 1 day | 04/03/2025 | 04/03/2025 | Nam |
| 5.4 | division | 1 day | 04/03/2025 | 04/03/2025 | Kien |
| 5.5 | exponentiation | 1 day | 04/03/2025 | 04/03/2025 | Vuong |
| 5.6 | Square root | 1 day | 04/03/2025 | 04/03/2025 | Nam |
| 5.7 | percentages | 1 day | 04/03/2025 | 04/03/2025 | Khanh |
| 5.8 | Backspace a character | 1 day | 04/03/2025 | 04/03/2025 | Tu |
| 5.9 | Clear all | 1 day | 04/03/2025 | 04/03/2025 | Kien |
| **6** | **Product Deployment** | **1 day** | **05/03/2025** | **05/03/2025** | **All members** |
| 3.1 | Release | 1 day | 05/03/2025 | 05/03/2025 | **All members** |
| 3.2 | Project Meeting | 1 day | 05/03/2025 | 05/03/2025 | **All members** |
| 3.3 | Final Submission | 1 day | 05/03/2025 | 05/03/2025 | **All members** |
|  | **Duration** | **8 days** | **26/02/2025** | **05/03/2025** | **All members** |

***Table 10:*** *detail schedule*

**3. REFERENCES**

1. <https://www.atlassian.com/agile/scrum>
2. [https://www.cprime.com/resources/whatis-agile-what-is-scrum/](https://www.cprime.com/resources/what-is-agile-what-is-scrum/)
3. <https://www.agilealliance.org/agile101/>
4. <https://fnb.mysapo.vn/admin/authorization/login>
5. <https://phanmemtinhluong.com/phan-mem-quan-ly-suat-an-cong-nghiep/>