Service Contract

**Project Description**

The Student Team agrees to provide the following services as part of a university project: Development of software for the Raspberry Pi platform to automate the retrieval of essential information from IoT devices when connected via USB or UART. This includes compiling data such as firmware version, chip model, and voltage usage into an XML format for storage or transmission ("Project").

**Service Contract for Software Engineering**

**Parties**

This Service Contract ("Contract") is made between the following parties:

- Student Team: Code Crafters

- Client: Ivan Burke with a mailing address of 157 Mountainview Drive, Westlake Country and Safari Estate, Skeerpoort, North West 0232 ("Client").

**Scope of Services**

The Student Team will perform the following services ("Services"):

1. Development of Software: Create software for the Raspberry Pi to interface with IoT devices connected via USB or UART.

2. Data Retrieval: Automate the extraction of essential information (firmware version, chip model, voltage usage) from IoT devices.

3. Data Compilation: Format the extracted data into an XML format suitable for storage or transmission.

**Deliverables**

The Student Team will deliver:

- A functional software application that meets the specified requirements.

- Documentation detailing the software architecture, user guides, and maintenance instructions.

- Test cases and results to ensure the software operates as intended.

**User Case Diagram Review and Error Handling**

During the development phase, the Student Team will create and review user case diagrams to ensure accurate representation of system interactions. The following steps outline the review and error-handling process:

**Error Identification in User Case Diagrams**

1. **Inconsistencies**: Identify and rectify inconsistencies between the user case diagrams and the project requirements.

2. **Missing Elements**: Ensure all necessary actors and use cases are included and correctly described.

3. **Redundancies**: Remove any redundant use cases that do not add value to the project.

**Error Prevention and Correction**

1. **Regular Reviews**: Conduct regular reviews of the user case diagrams with the Client to validate accuracy and completeness.

2. **Peer Reviews**: Implement peer review sessions within the Student Team to identify potential errors early.

3. **Feedback Incorporation**: Incorporate feedback from both Client and peer reviews into the user case diagrams promptly.

**Responsibilities of the Student Team**

- **Development**: Execute the development of the software according to the project specifications.

- **Testing**: Thoroughly test the software to ensure it meets all functional requirements.

- **Documentation**: Provide comprehensive documentation to facilitate future maintenance and updates.

- **Communication**: Maintain open communication with the Client to address any issues or changes in project scope.

**Responsibilities of the Client**

- **Requirement Specification**: Provide clear and detailed project requirements.

- **Feedback**: Offer timely feedback on deliverables and user case diagram reviews.

- **Support**: Assist the Student Team with any additional resources or information needed to complete the project.

**Timeline**

- Project Start Date: 25th April 2024

- Milestone 1: 3rd June 2024

- Milestone 2: 24th June 2024

- Milestone 3: 12th August 2024

- Milestone 4 : 30th September and 1st October 2024

- Final Delivery: 25th October 2025

**Acceptance Criteria**

The project deliverables will be considered complete when:

- The software meets all specified requirements.

- All identified errors in user case diagrams have been corrected.

- The Client has reviewed and approved the final software and documentation.

**Termination**

This Contract may be terminated by either party upon written notice if:

- A breach of contract occurs and is not remedied within 14 days.

- The Student Team or Client is unable to continue due to unforeseen circumstances.

**Signatures**

By signing below, both parties agree to the terms and conditions outlined in this Contract.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Team Representative

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Client Representative

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This contract outlines the expectations and responsibilities of both the Student Team and the Client, ensuring clarity and accountability throughout the project lifecycle.