

# Software Requirements Specification (SRS)

**Project Name:** Diamond In The Sky - Interactive Space Learning Game for Kids

**Version:** 1.0

**Date:** 01-10-2022

## 1. Introduction:

The Software Requirements Specification outlines the detailed specifications for the Diamond In The Sky project, an interactive space learning game aimed at children aged 10 to 12 years. This document provides a comprehensive understanding of the project's requirements, functionalities, interfaces, and constraints.

## 2. Scope:

The Diamond In The Sky project aims to create an interactive learning game that teaches children about stellar variability, star patterns, colors, brightness, and the dynamic night sky. The project focuses on developing an engaging, educational, and cross-platform application that seamlessly combines entertainment with learning.

## 3. Functional Requirements:

Refer to the Functional Requirement Document (FRD) for detailed functional requirements.

## 4. Non-Functional Requirements:

#### 4.1 Usability:

##### Requirement ID: NFR-US-001

**Requirement:** The application should have an intuitive and user-friendly interface.

Description: The interface must be easy to navigate, even for children aged 10 to 12.

#### 4.2 Performance:

##### Requirement ID: NFR-PRF-001

**Requirement:** The application should respond to user interactions within 1 second.

Description: The application's responsiveness should ensure a smooth and seamless user experience.

##### Requirement ID: NFR-PRF-002

**Requirement:** The application should handle at least 1000 simultaneous users without performance degradation. Description: The system must support a large number of users to ensure scalability.

#### 4.3 Compatibility:

##### Requirement ID: NFR-CPT-001

**Requirement:** The application should be compatible with Android and iOS devices.

Description: The application must function correctly on both major mobile platforms.

##### Requirement ID: NFR-CPT-002

**Requirement:** The application should be compatible with popular desktop operating systems (Windows, macOS, Linux). Description: The application's cross-platform compatibility should extend to desktop devices.

#### 4.4 Security:

##### Requirement ID: NFR-SEC-001

**Requirement:** User data must be encrypted and securely stored. Description: Personal and gameplay data should be protected from unauthorized access.

## **5. Collaboration with NASA:**

Refer to the Functional Requirement Document (FRD) for detailed requirements related to NASA data integration.

## **6. User Interface:**

Refer to the Functional Requirement Document (FRD) for detailed user interface requirements.

## **7. Future Enhancements:**

Refer to the Functional Requirement Document (FRD) for future enhancement requirements.

## **8. Conclusion:**

The Software Requirements Specification provides a comprehensive overview of the Diamond In The Sky project's specifications, including functional and non-functional requirements. The document outlines the project's scope, functionalities, interfaces, and performance expectations, ensuring that the final application meets the intended goals of engaging young learners with astronomy concepts.