DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

**PROJECT PROPOSAL**

# Project Title: -

Augmented Reality for Education

# Project Scope: -

* Detailed 3D models of the solar system's planets, moons, and other celestial bodies.
* Interactive features that allow users to explore, rotate, and zoom in on different parts of the solar system.
* Educational content that provides detailed information about each celestial body, aligned with school curricula.
* Cross-platform compatibility, ensuring the application can be used on various devices.
* User-friendly interface designed for students and educators.

The project scope includes the following key components:

* **Enhance Engagement:** Develop an AR application that captures students' interest

and encourages active participation in learning.

* **Improve Visualization:** Provide a 3D interactive experience that helps students better understand the spatial relationships and dynamics of the solar system.
* **Promote Interactive Learning:** Incorporate interactive features that allow students to explore and experiment with solar system concepts in real-time.
* **Increase Accessibility:** Ensure the AR Solar System application is accessible on multiple platforms, including smartphones and tablets.
* **Align with Curriculum:** Integrate content that aligns with educational standards, making it easy for educators to incorporate into their teaching.

1. Requirements: -

* **AR Development Platform:**

**Software:** Unity with AR Foundation, or similar AR development frameworks.

**AR SDKs:** ARKit (for iOS devices), ARCore (for Android devices) for enabling AR functionality.

**3D Modeling Software:**

* **Software:** Blender, Maya, or similar software for creating and animating 3D models of the solar system.
* **Cross-Platform Compatibility:**

**Devices:** The application must be compatible with iOS and Android smartphones and tablets.

**Operating Systems:** Support for the latest versions of iOS and Android, with backward compatibility for a few earlier versions.

* **Interactive Content:**

Development of quizzes, informative texts, and audio guides that provide detailed educational material on each celestial body.

1. Problem Statement:

Traditional methods of teaching astronomy, such as textbooks and static images, often fail to fully engage students or convey the vastness and complexity of the solar system. These methods can make it difficult for students to visualize and understand spatial relationships, scale, and dynamics of celestial bodies, leading to gaps in comprehension and retention.

**STUDENTS DETAILS**

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| **Name** | **UID** | **Signature** |
| NAVULOORI NAREN  SPARSH THALYARI  VANSHIKA SEDHARA | 21BCS6128  21BCS6111  21BCS6092 |  |

**APPROVAL AND AUTHORITY TO PROCEED**

We approve the project as described above and authorize the team to proceed.

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| **Name** | **Title** | **Signature**  **(With Date)** |
| NIRMALYA BASU | AR SOLAR SYSTEM |  |