

## Team Spark

### Abstract

#### Development of an Interactive Platform for Raising Awareness on Indian Standards

##### Background:

The Bureau of Indian Standards (BIS) is the National Standards Body of India, ensuring that products in the market comply with Indian Standards for quality, health, and safety. Through its activities in Standardization, Conformity Assessment, Laboratory Testing, and Training, BIS aims to create awareness about the importance of Indian Standards among common consumers, industries, students, and other stakeholders. Traditional methods such as quizzes have been used to promote this awareness, but there is a need for more engaging and interactive online activities to reach a wider audience.

##### Solution Overview:

The proposed solution is an innovative, interactive platform designed to organize online activities and games within a 3D environment to develop interest, knowledge, and awareness of Indian Standards. The platform will be integrated with various features, including immersive 3D activities, gamified experiences, and a generative AI-based chat bot for answering queries related to Indian Standards. The objective is to provide an engaging and educational experience for users while promoting the significance of quality and standards in daily life.

##### Key Features:

1. **3D Environment Activities:**Users can explore and participate in various activities within a virtual 3D space. These activities will include simulations and interactive scenarios related to Standardization, Conformity Assessment, and Testing, providing a hands-on understanding of BIS's processes.
2. **Gamified Experiences:**The platform will feature games that challenge users to solve problems and complete tasks related to Indian Standards. These games will be designed to be both fun and educational, ensuring that users are engaged while learning about the importance of standards.

3. **Goodies and Badges:**To incentivize participation, users can earn virtual badges and other goodies by completing activities and games. These rewards will be visible on their profiles, encouraging users to engage more with the platform.
  
4. **Generative AI Chat Bot:**An AI-based chat bot will be available to answer user queries about Indian Standards. This chat bot will provide accurate and timely information, enhancing the overall user experience and ensuring that users' questions are addressed promptly.
  
5. **Integration and Accessibility:**The platform will be accessible via the existing BIS website, as well as Android and iOS mobile applications. It will be developed using open-source technologies to ensure flexibility and scalability.

#### Expected Impact:

By leveraging a 3D environment, gamification, and AI, the platform aims to increase awareness and understanding of Indian Standards among a broad audience. The engaging and interactive nature of the platform will make learning about standards more appealing, leading to greater participation and knowledge retention.

#### Deliverables:

- A functional prototype of the platform, demonstrating all features and scalability.
- Sample activities and games for different stakeholder groups (Academia, Industry, Standards Clubs, Consumers).
- Comprehensive documentation, including user manuals, installation guides, and API documentation.
- User testing and feedback data to validate the effectiveness and usability of the platform.

- A detailed report and presentation on the development process, including technical challenges and ethical considerations.



Date:13.09.2024

**Sub: BIS Hackathon 2024 - Nomination**

I'm pleased to inform that the below team from our college to participate in the BIS Hackathon 2024. AICTE application number of our college is 1-36531100771/2023/EOA

Team Name:TEAM SPARK

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I do hereby declare that all the above information given by me are true to best of my knowledge and belief

Sincerely

*G.A. Sathish Kumar*  
13/9/24  
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