A REPORT

ON

VIRTUAL CONFERENCE

BY

GATHVIK NARAYAN KOLLA - 2022B3A70648P

AT

CDAC

HYDERABAD,

A Practice School-

I Station of

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI

(June, 2024)

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GATHVIK NARAYAN KOLLA - 2022B3A70648P - MSC ECONOMICS + BE CSE

Prepared in partial
fulfillment of the Practice
School-I Course Nos.
BITS C221/BITS C231/BITS C241

AT

CDAC

HYDERABAD,

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I would like to extend my heartfelt gratitude to the entire team at CDAC for their unwavering support and guidance throughout my internship. I am particularly indebted to my mentors Mrs. Indraveni, Mrs. Sheetal and also Mr. Srinivas Appari, whose expertise, insightful feedback, and constant encouragement have been pivotal in enhancing my learning experience. Their commitment to fostering my growth and understanding has been truly inspiring.

A special thanks to my colleagues, whose collaborative spirit and willingness to share knowledge have created a stimulating and supportive work environment. Their camaraderie and readiness to assist with various projects have made my time at CDAC both enjoyable and profoundly educational.

I would also like to acknowledge the administrative and support staff at CDAC, whose behind-the-scenes efforts have ensured a seamless and productive internship experience. Their dedication and hard work have been essential to my professional development.

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Thank you all for making this internship an unforgettable and enriching journey.

ABSTRACT

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI (RAJASTHAN)
Practice School Division

Station: …CDAC…… **Centre** ....Hyderabad.....……..

Duration ...2 months…… **Date of Start**.....28-05-2024...……

Date of Submission ....23-06-2024...……

Title of the Project: Virtual Conference

ID No./Name/Discipline : 2022B3A70648P/ Gathvik Narayan Kolla/
Of the Student MSc Economics + BE CSE

Name(s) and designation(s) : Mrs. Indraveni, Joint Director of CDAC Hyderabad,
Of the expert(s) Mrs. Sheetal, Development Team.

Name of the : Mr. Srinivas Appari
PS Faculty

Key Words: API, Project, Event, Organizer, User.

Project Areas: API Development

Abstract: This project aims to develop a comprehensive system for managing a conference with user submissions, reviewers, and organizers. The core of the system will be a set of APIs designed to facilitate seamless interaction between these stakeholders. The APIs will handle tasks such as submission of papers, assignment of reviewers, review processes, and communication with organizers. My role focuses on designing and implementing these APIs to ensure they are secure, efficient, and user-friendly. By providing a robust backend, this project will streamline conference management, making it easier for users to participate and for organizers to oversee the event.

Signature(s) of Student(s): GATHVIK Signature of PS Faculty

Date : 23 - 06 - 2024. Date

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INTRODUCTION

This project focuses on developing a comprehensive API system to streamline the management of academic conferences, facilitating user submissions, reviewer assignments, and organizer coordination. By creating a suite of well-designed APIs, the project aims to enhance the efficiency, security, and user experience for all participants involved in the conference lifecycle.

MAIN TEXT

Project Overview

The project involves creating APIs that will support the following functionalities:

1. User Submissions: Enabling users to submit papers and track their submission status.
2. Reviewer Management: Facilitating the assignment of reviewers to submitted papers and managing the review process.
3. Organizer Tools: Providing organizers with tools to manage submissions, reviewer assignments, and conference scheduling.

Development Approach

- Design Principles: The APIs will be RESTful, ensuring compatibility with various web technologies. Security measures will include authentication and authorization protocols.
- Implementation: Agile methodologies will be employed, allowing iterative development and incorporating feedback from stakeholders to refine functionality.

Key Features

- Secure Authentication: Ensuring only authorized users can access the system.
- Comprehensive Documentation: Providing clear guidelines for developers to integrate and use the APIs.
- Error Handling: Implementing robust error management to ensure reliable operation.

CONCLUSIONS

The development of these APIs is expected to significantly improve the management of academic conferences by automating and simplifying various processes. For future work, it is recommended to continually gather feedback from end-users to further refine and enhance the APIs. Additionally, expanding the API functionality to include features like automated scheduling and real-time notifications could provide further benefits.

Furthermore, ongoing collaboration with stakeholders, including conference organizers, reviewers, and participants, will be crucial in identifying new requirements and addressing any challenges that arise. Regular updates and maintenance will ensure the APIs remain secure and efficient. Investing in training and support for users will also be important to maximize the system's effectiveness and adoption. Ultimately, these efforts will contribute to a more streamlined and user-friendly conference management experience.

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GLOSSARY

API (Application Programming Interface): A set of rules that allows different software entities to communicate with each other.

RESTful: An architectural style for designing networked applications, relying on stateless, client-server communication.

Authentication: The process of verifying the identity of a user or system.

Authorization: The process of determining what an authenticated user or system is allowed to do.

Agile Methodologies: A group of software development methods based on iterative development, where requirements and solutions evolve through collaboration.

Error Handling: The process of anticipating, detecting, and resolving issues that occur during the execution of a program.