### A project report On

### **Kura-Kani**

### Submitted in partial fulfillment of requirement of Project – VI BCA BCA379CO

### Of

### Bachelor of Computer Application

**Submitted To:**



Purbanchal University Biratnagar, Nepal

**Submitted By:**

### Bikalpa Sangat (363418)

### Grishma Shrestha (363420) Kilika Tami Shrestha (363421)

**KANTIPUR CITY COLLEGE**

### Putalisadak, Kathmandu

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Grishma Shrestha (363420) Kilika Tami Shrestha (363421) **Project Supervisor**

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### Putalisadak, Kathmandu

**CERTIFICATE OF PROJECT APPROVAL**

This is to notify that the topic chosen by, Bikalpa Sangat, Grishma Shrestha and Kilika Tami Shrestha students of Bachelor of Computer Application, Semester VI, for their semester project has been deemed appropriate and meets the credit requirements set by Purbanchal University (PU), Biratnagar, Nepal

The project committee has granted approval for the following topic for the mentioned students.

Topic Assigned: **Kura-Kani**

……………….. …………………..

Mr. Ashim Kc External Examiner

Lecturer (BCA/BIT) Purbanchal University Project Supervisor

Kantipur City College

**CERTIFICATE FROM SUPEVISOR**

This is to certify that the project titled “**Kura-Kani**” submitted by Bikalpa Sangat, Grishma Shrestha and Kilika Tami Shrestha to the Department of Information and Technology at Kantipur City College, Kathmandu, Nepal, as a part of the requirements for Project-VI (BCA379CO), is an authentic and original piece of work. It was undertaken by them under my close supervision and guidance.

………………… Mr. Ashim Kc Project Supervisor

Department of Information Technology

Place: Kantipur City College, Putalisadak, Kathmandu Date: September 11, 2023

**ACKNOWLEDGEMENT**

We would like to express our deepest appreciation to all those who provided us the possibility to complete this report. We would like to acknowledge with much appreciation the crucial role of the staff of Kantipur City College, who gave us the permission to use all required equipment and the necessary materials to complete the task.

Furthermore, special thanks to our project supervisor, Mr. , whose contribution in stimulating suggestions and encouragement, helped us to coordinate our project especially in writing this report also suggesting us about the task and guiding us during the completion of this project. Finally, many thanks to the lab in- charge for providing the facilities of the lab during our project. We must appreciate the guidance given by other supervisor as well as the panels especially in our project presentation that has improved our presentation skills, thanks to their comment and advice.

**ABSTRACT**

Kura-Kani is a chat application that is developed for users to instantly communicate with each other. This project is a web-based application for users to instantaneously communicate with one another from any place at real time. The most important part of building a good chat application is to focus on the real time data flow on web. This project spends a good amount of research to find the most appropriate technology for delivering the data flow, which is REST API for account management, Web Socket form socket.io library for text chat and react-notify as real time push notification. We have also used variety of cloud computing services for different purpose as well as from hosting images to users in Cloudinary to cloud database as well. The cloud-based database and single threaded backend system written in Nodejs is capable of handling thousands of users simultaneously. With a proper loaded balancing the system can be scaled up for millions of users.

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