APP SECURITY
FINAL PRESENTATION

What is EnvironMeet?

A social media web application for people interested in sustainability and the environment to meet like-minded individuals, get inspired and pursue sustainability causes together.

Features and functions

SOCIALISE

People from all walks of life who wants to help save the environment can converse with alike-minded people through EnvironMeet

EVENTS

Many types of events on environmental sustainability can be found and those interested can sign up through a form as well

SUSTAINABILITY MADE FUN

EnvironMeet gamifies sustainability by allowing users to earn points and climb the leaderboards whenever they participate in sustainability efforts.

Rohan's
Features

Application Features
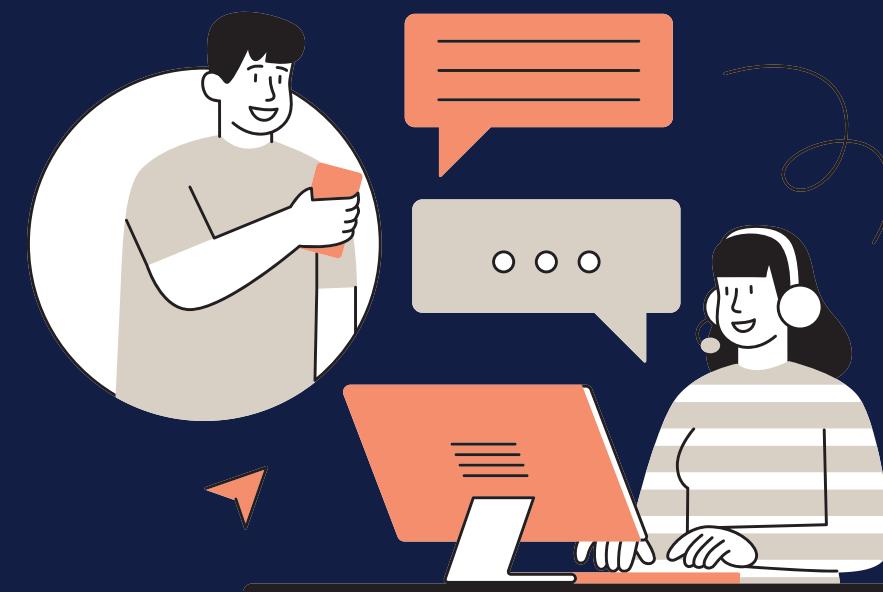
Feed
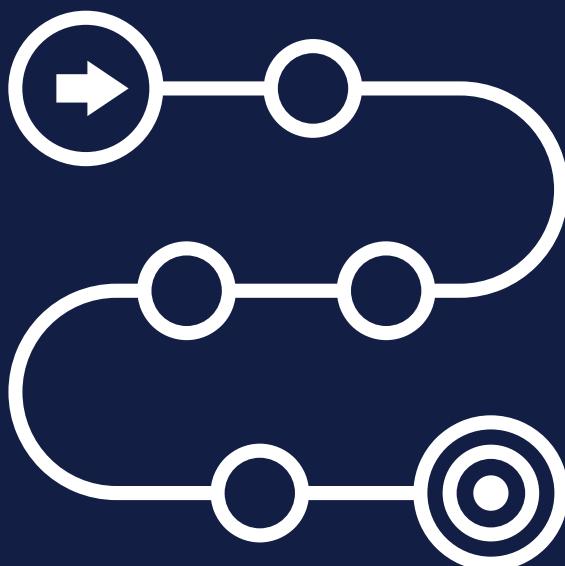
- Posting Function (CRUD)
- Comments (CRUD)
- Share Posts
- Like Posts

Chats

- Create Chat Room
- Join Chat Room
- Send Live Real-Time Messages

Security Features

Identifier Obfuscation

▶ ID-Hash Mappings

▶ Obfuscates Object Identifiers

▶ Acts as a Layer on top of access control to prevent IDOR
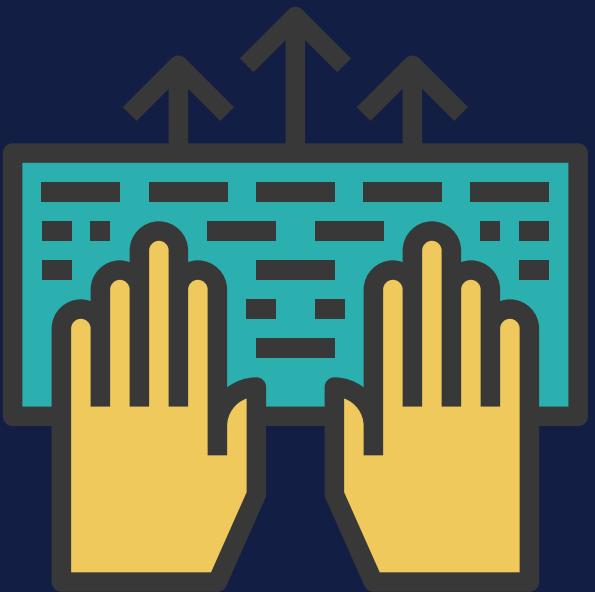
CSRF Prevention

▶ CSRF Token

▶ Mandatory for all Requests

Security Features

Input Validation

▶ Word Limit

▶ Escapes XSS and Injection attacks

Image Validation

▶ Virus Total Scan

▶ Image Randomisation

▶ File Header Check

▶ Image Compression

Security Features

Moderator Bot

▶ Detects, logs, and sanitises potential XSS attempts

▶ Detects, log and redacts potential Phishing Links

Account Flagging System

▶ Flags accounts when suspicious activity detected

▶ Locks account after 5 flags

Security Features

Rate Limiting

▶ Layered Rate Limiting (etc. per minute and per day)

Integrity Monitoring

▶ AWS Lambda Function to check integrity of production code

▶ Cloudwatch to trigger function every minute for live monitoring

Security Features

Logging and Monitoring

- Logs to AWS OpenSearch Dashboards System
- Dashboard for Analysis
- Alerts sent to Slack Channel
- Acknowledge alerts once solved in OpenSearch
- Anomaly Detector to alert anomalies

THANK YOU

Let's make the Earth great (and secure) again.