Five best projects of A.Y. 2021-22

1) **Project Name: App Based Tele-medical and Information System for Agartala**

Participants: Manav Agarwal (BE-IT-A-01)
: Mohit Gupta (BE-IT-A-21)
: Jyoti Khare (BE-IT-A-51)

Project Guide: Dr. Aaditya Desai

Project Description: Technology has drastically changed the health industry and the evolution of Telemedicine over the years has been of tremendous importance. Telemedicine is a way to provide medical services in remote areas and connect patients to doctors irrespective of the distance. This App focuses on developing User friendly to connect remote areas with medical facilities with services like scheduling appointment booking with doctors nationwide and other health services.

Features of the project :

Patient application

- Scheduling appointments with various doctors
- Chatting system with the respective doctor
- Video calling facility
- update profile and medical history

Video Link:https://drive.google.com/file/d/1MkcPvJah04XjZhHtPNMcaAB0sTGiaFTp/view

2) **Project Name: Recommendation Of Book And Predicting User Ratings Of Book Using Covers**

Participants: Ritika Chaube (BE-IT-A-10)
: Parth Desai (BE-IT-A-18)
: Pratik Bhatt (BE-IT-A-06)

Project Guide: Mr.Shridhar Kamble

Project Description: Book being judged just by its cover is something that according to human psychology holds more weightage than it's the rating that is given by many. How does a model gives a predicted rating when we consider the book image and its description. We have proposed a model which uses 3 models combined Convolutional Neural Network, Multi-Layer Perceptron and TFiDF to give a predictive rating for a book. The combined model also tests how much the saying "Don't judge a book by its cover" holds for the model we made.

Features of the project :

1) Build recommendations model using TFiDF method of 88.8 percent
2) Build a prediction model using Convolutional Neural Network and Multilayer Perceptron
3) Trying to see how much does the quote "Don't judge a book by its cover" works when we make our model as we use book images, descriptions previous provided readings into consideration while building the model
4) Used text-to-audio feature (audiobook) as a business perspective
5) Features like bookmark, favourite and newsletter and auto-completion of words in search have been used
6) For authors provided feature of in-built writing has been provided

Video Link:https://youtu.be/Qq-DcWNoGhE

3) Online Training and Placement Portal:

"**ONLINE TRAINING AND PLACEMENT PORTAL**" project is built in order to automate the training and placement activities conducted by the T&P cell of any college. This project executes digitization and assists with the errors and issues caused by human blunders. The portal helps the student and faculty to work together and ease the communication process. A dashboard provides every user with different features to interact with and access the portal.

Features of the project:

1. Students: They can appear for quizzes, register for companies, receive notifications, etc.
2. Faculties: They can upload a quiz, evaluate students, send notifications individually or to groups, upload notes, and materials for learning purposes, etc.

3. Admin: The Admin can set companies that are visiting for the recruitment process, filter student performance, select students eligible for a particular company's recruitment, promote students to the next rounds, connect with faculties for setting up links, and meetings, etc.

Video Link: https://youtu.be/oIWqAYJ_OiE

4) Project Name : Route Optimization for Smart Waste Management System

Project Members :
Bimalesh Seth (BE-IT-B-66)
Vikas Tiwari (BE-IT-B-47)
Durgesh Tiwari (BE-IT-B-46)

Project Guide : Mrs. Neha Kapadia

Project Description:

Overflowing dustbins and garbage spilled out of them are a common sight nowadays. Such unhygienic sites pose threat to nearby areas as they tend to serve as breeding zones for disease spreading organisms like mosquitoes, flies, stray animals, microorganisms, etc. Moreover, they waste spilled out may also cause choking in the animals that come in search of food near them. The densely populated areas need to take additional care because extremely high amount of waste is generated and dumped in the bins.
Hence, the garbage should be collected from the bins on regular interval of time, where the vehicle should take minimum possible route to reach to that node(dustbin) which will eventually save time and fuel. The proposed system consists of admin and driver end where the data of dustbin is fed statically. The admin can manage over all activity from adding removing driver to tracking the activity of each driver. In Driver end, the driver is allocated bins on regular basis and on embedded map and the optimized route will be displayed. The proposed algorithm utilizes A* algorithm in the origin. Algorithm has been optimized in a way that it includes some additional factors such as size of the bins and size of the vehicle, road quality, distance, and overflow time of dustbin.

Features:

1. Realtime tracking of vehicles and dustbins.
2. Easy and efficient system to assign vehicles and dustbins.
3. The driver will take less time to travel from source to destination which will eventually lead to less fuel consumption.
4. Overflow of dustbins and many problems can be avoided in one go.
5. The route to reach from a particular source to the destination is selected dynamically in a way such that the route is optimized and the bins which need immediate attention for garbage collection are fulfilled.
6. Admin can track driver activities, assigned bins, and more from the admin portal which has a user-friendly UI, and the portal can be accessed from the web app.

Video Link : https://drive.google.com/file/d/1cTDJaCvkE41VjFb4sgOxox2deA7AqePn/view