

ONLINE CYCLE RENTAL SYSTEM

MAJOR/ MINOR PROJECT SYNOPSIS

BACHELOR OF TECHNOLOGY

Information Technology

SUBMITTED BY

RANDEEP KAUR , NIKITA NEGI , SIMRAN MAKKAR

University Roll no. 1805545 , 1805533 , 1805559

Class Roll no. 1821060 , 1821044 , 1821079

January - June 2021



GURU NANAK DEV ENGINEERING COLLEGE

LUDHIANA-141006, INDIA

Contents

1	Introduction	1
2	Objectives	2
3	Feasibility Study	3
4	Methodology/ <i>Planning</i> of work	4
5	Facilities required for proposed work	5
6	References	6

1 Introduction

The purpose of this project is to provide a platform for users and rental products owners in an effective and efficient manner. Our online cycle rental system is designed to offer users with full cycle rental experience. Users can select a cycle through the app and book it. The booking process allows users to reserve cycles ahead of time which helps prevent the “out of stock” scenerio when customers arrive at cycle station.

This project is based on online cycle renting system implemented in java runtime environment(JRE) and created in the android app studio with the help of firebase connectivity . This application is a just simple implementation of a bicycle rental service which will provide bicycles on rent on a genuine rent fees. To use it , first the customer needs to provide his/her basic details like name, phone number, DOB,etc. The customer can go through the information provided in it and can pick any bicycle as per his/her choice.

It has divided the blogs so that customer can use it easily and coveniently and he/she may not have any problem with the basic details about the bicyle type he/she wants to select for . The blogs are also divided on the basis of age group like for childrens, adults and aged.

To use one of the many bicycles on bicycle station of the city, the customer needs to register himself on the app, which lists personal data (name, phone number, credit card number, etc.). The application can also be viewed online information about the number of bikes in parking lots To use the rental service, you need to have a balance of bank card not less than 100\$ for the online payment otherwise the payment can also be accepted at the time of take off. Rentals are different according to the type/brand of the bicyle chosen by the customer. The actual rental of a bike has a defined lifecycle. At first it can be booked for a period of time. The extra time will be charged accordingly. The Booking can of course be canceled. Additionally the details of the Booking can contain an Offer for a number of ItemModels. The offers will be proportional to the item chosen and also extra offer will be given to the regular customers.

2 Objectives

The main objectives of the project are :-

1. The first objective is to implement the Tracking System for any fraud detection or disloyalty.
2. The second objective is to implement the calorie burner module so as to keep the track of calories.

3 Feasibility Study

1. **ECONOMICAL FEASIBILITY:** Being an ML integrated website this model will have a hosted domain. The model will be hosted in heroku. The system will follow all freeware software standards. No cost will be charged during the development of the project.
2. **TECHNICAL FEASIBILITY:** The main technologies and tools that are associated with project are keras.io, TensorFlow, html, css, nodejs, github, Jupyter notebook.
3. **OPERATIONAL FEASIBILITY:** The project overcomes all its arithmetic problems and fully able to achieve all the objectives. The project will be fully operational and user find no difficulty for operating and testing the project. Project efficiency, performance and controls will be idiol and epitome.

4 Methodology/ *Planning* of work

The workflow of this app is in this particular way:-

1. Firstly the installation of Android studio held , then in that language mode will be selected for creating.
For this project the selected language will be JAVA.
 2. JAVA codes will be written for making
 3. Then the user interface comes into picture where the user can fill his/her details as a proof
 4. For every user the respective database will be created as a backup and for effectiveness of the project.
 5. Google Firebase will be used for database. Android studio will import the firebase with API Key, copy it in the gradle file and then sync it.
- The various modules are:-
 - USER INTERFACE:- sign in , sign up , create account
 - CONTENT:- gender option, age group, price ranging,
 - USER INFO:- user name, contact number , address.
 - PAYMENT METHOD:- net banking, credit/debit cards, paytm, paypal, googlePay
 - ID-PROOF:- adhaar card details.

5 Facilities required for proposed work

Software required:

- Android app studio
- Google firebase connectivity

6 References

1. Anthony J. Dos Reis - <https://ieeexplore.ieee.org/book/6381794>
2. Abhishek Gupta “Computer Networks” <https://www.learnabhi.com/ieee-standards-in-computer-networks/>