

DriveThru

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Introduction

- An electric vehicle (EV) is a vehicle that uses one or more electric motors for propulsion.
- With DriveThru app we can find stations and charge our electric vehicle with easy and convenient steps.
- Allows us to :
 - locate and navigate a charging station.
 - easily start and stop charging.
 - view live charging status.
 - pay for charging.

Existing System

- Currently, most of the Indians are heavily dependent on the fossil fuel driven vehicles, as they are unaware about the benefits of electric vehicles.
- As most of the people are reliant on common vehicles, there are not many apps for the charging of electric vehicles.
- In developed countries, most of the people are using electric vehicles.

Proposed System

- With DriveThru app we can find stations and charge our electric vehicle with easy and convenient steps.
- Purpose : to locate EV Charging stations throughout the country.
- Allows us to :
 - locate and navigate a charging station.
 - easily start and stop charging.
 - view live charging status.
 - pay for charging.

Proposed System

It provide benefits such as :

- Provide a unified application for charging electric vehicles.
- Easily know surrounding amenities and conveniences available in vicinity of Charge Spot.
- Book your time slot in advance and Save our Time

Proposed System

- Features
 - Find Nearby Charging Spot.
 - Save EV Information.
 - Get Notified.
 - View Booking Log.

Modules

- Revenue and Tariff management
 - Tariff plans are created to charge EV users for consuming energy rate/kWh. These plans can be added or altered in the CMS by an admin.
 - Multiple plans can be created and applied to different charge points individually based on various factors like location, area, peak hours etc.
 - Tariff can be of type 'Charging' which is used for calculating energy bills and 'Service fee' can be applied separately as another component on the bill for every Charge point.
 - Rate per unit is calculated automatically as the rate break up field which is filled out by the admin

- Dashboard and Reports
 - In this section admin can generate and view a report for charging summary, users and alarms for a selected time period.
 - These reports can be scheduled on daily, weekly or monthly basis and sent to a mailing list.

- User and Role Management Module
 - An admin can create multiple roles and assign it to different users and provide permissions based on the role.
 - For managing permissions admin has to create a Role first under Role management with the right set of permissions for each functionality on CMS.
 - These permissions for the role can be changed by the admin when required.
 - The users can be managed by assigning different roles, changing permissions for these roles when required.

Product Backlog

Sl.No	Description	Priority
1	Admin can add/alter tariff plan	1
2	Admin can create multiple tax plan	2
3	Admin can add tax group	3
4	Admin can add surge rate	4
5	Tax group management	5
6	Generate and view a report for charging summary.	6
7	Generate users and alarms for a selected time period	7
8	create multiple roles and assign it to different users	8
9	Provide permissions based on the role Of user.	9

Sprint Backlog

S/no	Sprint	Date	Estimated time	Sprint Goal	Status
1	1	13/3/21 to 14/3/21	30 hr	Discussion on topic & their requirements	completed
2	2	15/3/21	24 hr	Submit the topic & abstract	completed
3	3	16/3/21 - 18/3/21	60 hr	Assessments	completed
4	4	19/3/21 - 20/3/21	10 hr	Detailed discuss on topic	completed

Sprint Backlog

5	5	22/3/21 - 24/3/21	20hr	Discussion about module	Not completed
6	6	25/3/21	10hr	prepare product backlog	not completed
7	7	26/3/21	10hr	prepare sprint backlog	not completed
8	8	27/3/21		DFD	not completed
9	9	28/3/21		Discussion on database	not completed

Hardware and Software Specifications

- Hardware Specifications
 - Windows 10
 - 32-bit or 64-bit
 - 4 GB Ram
 - Intel/AMD @2.0 GHz
- Software Specifications
 - Android , Flutter
 - Firebase as backend

Git Screenshots

The screenshot displays the GitHub interface for the repository 'gopikam66/V-Charge'. The browser's address bar shows the URL 'github.com/gopikam66/V-Charge/commits/main'. The page is organized into sections based on commit dates:

- Commits on Apr 3, 2021**
 - Merge pull request #2 from gopikam66/gopikam66-patch-2** (Verified, 846e036)
 - gopikam66 committed now
 - Add files via upload** (Verified, 0efd7fa)
 - gopikam66 committed 43 seconds ago
- Commits on Apr 1, 2021**
 - Merge pull request #1 from gopikam66/gopikam66-patch-1** (Verified, 7f3db69)
 - gopikam66 committed yesterday
 - abstract added** (Verified, d2be5c4)
 - gopikam66 committed yesterday
- Commits on Mar 29, 2021**
 - Initial commit** (Verified, e64f38e)
 - gopikam66 committed 5 days ago

Each commit entry includes a green 'Verified' badge, a copy icon, the commit hash, and a diff icon. The repository name 'gopikam66' is accompanied by a green checkmark icon.

Figure: Screenshot

Conclusion

- Going to introduce an app with more features.
- Goal : To accelerate the adoption of clean electric vehicles thereby making travel cheaper, cleaner and more enjoyable throughout India.

Thank You