**On Road Vehicle Breakdown Assistance Search**

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*Abstract –* *Travelling day to day became integrated part of everyone. To travel we use different types of vehicles. A machine is not for a life time and with day to day usage and time-tested in various conditions, it is meant to witness some kind of breakdowns. Many breakdowns can be resolved on the spot by self-repairing. A lot of people are facing difficulties getting help when their Vehicle breaks down on the road.*

*These problems are the motivations for the development of this project to help those who are in need when their Vehicle breaks down along the roads. The objective is to develop an On Road Vehicle Breakdown Assistance Search application that will help the user to avail help by using the application and get access to the nearby mechanic and thereby contact them.*

***Keywords-*** *Agriculture, machine learning , crop yield prediction. Car Repair Service Providers, Car Breakdown, Car Breakdown Service Station Locator System Road Safety, Intelligent Vehicle.*

**INTRODUCTION**

Today most of people use their own vehicle for travel. While travelling most of we are troubling with breakdown of our vehicle on the road. This is a worst experience that they have to face. When our vehicle suddenly breakdown on the road, the user have to search for mechanic and have to see a spare-part shops near to their location. At that time we can’t able to search for a good mechanic and we have to arrange some other transportation. In existing system, they can use getting current location alone for finding the location. If we want to identify the nearby location means it needs some other application which contains some drawbacks. That is we should give the location and it will search the nearby location for what we given in searching.

On Road Vehicle Breakdown Assistance Search (ORVBAS) is going to be a good Solution for the people who seek help in the remote locations with mechanical issues of their vehicle. Users of the On Road Vehicle Breakdown Assistance will be the registered public and they be getting connected with the particular mechanic through the trustworthy On Road Vehicle Breakdown Assistance Search (ORVBAS) system. Because only approved mechanics are enlisted in the On Road Vehicle Breakdown Assistance Search (ORVBAS) system. Also they are under monitoring by the ORVBAS system for not charging any extra service fee from the users as every user is updating their feedback about the availed service through ORVBAS system.

**METHOLOGY**

**Features & Module:-**

**1. Admin:-**

### Login: Admin need to login with valid login credentials.

### View Mechanics: Admin can view the registered mechanics with their

Details and has the access to allow or block a mechanics.

**View Users:** Admin can view all the registered user details.

### View Feedback: Admin can view all the feedback given by the user and Mechanic.

**2. User:-**

**Register**: User can register with all their details.

**Login**: Registered user can Login with their credentials.

**Search Mechanics:** User can search for local mechanics on the basis of their locations.

**Send Request:** On selection of the mechanics, the user can send the request to the respective mechanic.

**Feedback:** User can give their feedback accordingly.

**Module:** Type of breakdown normal/critical If normal then provide Assistance through the aap by manually if critical then provide support mechanics.

**3. Mechanic:-**

**Register**: Mechanics can register with all their information.

**Login**: Registered mechanics will be provided access to Login if the admin will allow or block.

**View Request**: Mechanics can view the request which is sent by the user.

**Feedback**: Mechanics can provide their own feedback.

**Module**: You can provide assistance nearby Hotel, Petrol pump, Hospital, Toll Naka or any near places for support.

**DESIGN**

**Requirements:-**

**1. Software Requirements:**

1. Windows 7 or higher
2. Xampp-win32-5.5.19-0-VC11
3. Visual Studio Code

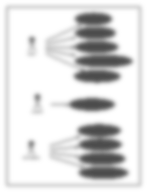
**2. Hardware Requirements:**

1. Processor – Dual Core
2. Hard Disk – 50 GB
3. Memory – 1GBRAM

**Future Scope:**

In Future, the vehicle and spare parts shop will be categorized according to the vehicle model. That is help to user found their spare-parts according to the type of the vehicle by saving their time. In addition to that the list of hospitals and, Hotel, Petrol pump, Toll Naka or any near places can be added.

**SYSTEM ARCHITECTURE:**



**Register**

**login**

**ViewDetails**

**User**

**Search Records & Call**

**Post feedback**

**Provide Approval**

**Admin**

**register**

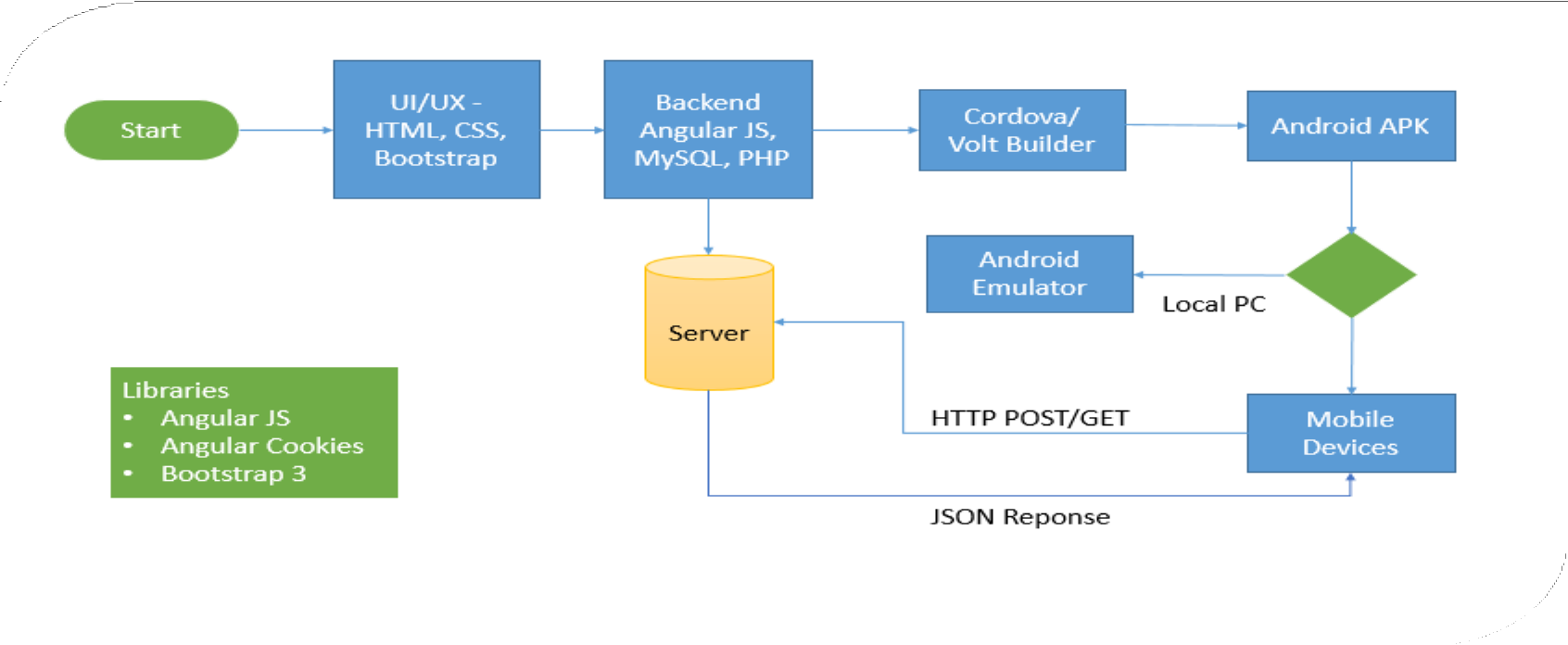
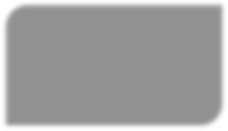
**Login**

**Mechanic**

**post details**

**View feedback**

**CONCLUSION**



When the vehicle breakdown occurs the driver have to see a mechanic or the repair shop. The driver has to ask for help from the people. By using this application, the user can find mechanic based on user location. The user can get the mechanical help directly and easily. This is help to save user’s time while the traveling.

When the breakdown occurs, user can fix their vehicle immediately. That makes comfortable the user. They won’t make tired their journey.

First and foremost, I have to thank my

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**REFERENCES**

*[1] Shuiping Wei, Bangyan Ye, Zhiguang Fu, (2007) "Research on GPS Positioning Information Transfer Based on Wireless Network, 28(6): 589-592.*

*[2]Mark L.Murphy, (2008) "The Busy Coder's Guide to Android Development," United States of America, Commons Ware, and LLC.*

*[3] M.Murphy,(2010) Beginning Android 2, Apress.*

*[4] R.Meier,(2010) Professional Android 2 Application Development, Wiley [5]Burnette,(2009) Hello Android, the Pragmatic Programmers.*

*[6] V. Milanés, J. Pérez, E. Onieva, C. González, and T. de Pedro, (2010) "Lateral power controller for unmanned vehicles," Elect. Rev., vol. 86, pp. 207-211.*

*[7] J.Pérez,V.Milanés, and E.Onieva, 2011 "Cascade Architecture for Lateral Control in Autonomous Vehicles," IEEE Tr. on ITS, vol. 12, pp. 73-82.*

*[8] M. H. Lee, K. Lee, S, H. G. Park, Y. C. Cha, J. D. Kim, B. Kim, et al., 2012 "Lateral Controller Design for an Unmanned Vehicle via Kalman Filtering," International Journal of Automotive Technology, vol. 13, pp. 801-807.*

*[9] M. Elbanhawi, M. Simic, and R. N. Jazar, 2013 "Autonomous Robots Path Planning: An Adaptive Roadmap Approach," Applied Mechanics and Materials., vol. 373, pp. 246-254.*

*[10] M. Elbanhawi, M. Simic, and R. N. Jazar, 2014 "Continuous-Curvature Bounded Path Planning Using Parametric Splines," Frontiers in Artificial Intelligence and Applications, vol. 262, pp. 513-522.*