Android Based Electronic Product Servicing System

Md. Tasluf Morshed Rhyme1, Md. Assadujjaman Tilok2, Professor Dr. Md. Fokhray Hossain3,

Daffodil International University, Dhaka-1207, Bangladesh

1,2,3Department of Computer science and Engineering, Faculty of Science and Information Technology,

Email: tasluf15-12089@diu.edu.bd, assadujjaman15-12594@diu.edu.bd, drfokhray@daffodilvarsity.edu.bd

**Abstract**

**Keywords:**

Android App, Servicing, Repair, React Native, React, Nodejs, MongoDB, Web App, Electronic Product

**In The 21th  century while the world is vastly depending on electronic goods and technology in that very time people from Bangladesh are facing difficulties to find a optimal servicing solution for their household necessaries. Sadly a number of factors can be accountable for the issue. Undoubtedly service policy is the root of it. However, this project intendant to build a service system, considered as “Android Based Electronic Product Servicing System” which could be the ultimate solution for the purpose. This project expect that people don't need to go out for a servicing solution. User can simply register their problem and then we will send a technician to solve the problem.**

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1. **Introduction**

Along with the rapid development of technology, the servicing system is not improving very speedily. It is considered to be a massive problem not only in Bangladesh but also South Asia. Which is generating a lot of controversy while many people are speaking strongly against this issue. Even today, whenever a product collapse, user have to take this to a service point and wait for a long time to fix it.

Now it is necessary to structure the service system which is based on time efficiency and skilled technicians. This advanced system may upgrade the un ethical servicing trends by developing an user friendly application, Therefore, the objective of this study is to develop the Android-based Electronic Product Servicing System in order to reinforce the users satisfaction.

The most widely used operating system in the smartphone is Android and ios. Therefore, Developers of the project are working on an android app and web application for this service. To make an android app they want to use React native. It's a javascript framework that helps us to build an android and ios app. It's built on top of the React framework. For the web application, this will use React framework. For the backend, it will use Nodejs and for the database, developer want to use MongoDB.

1. **Problem Statement**

* Whenever any electronic product run out of warranty user had to face difficulties.
* People have to go out door to door to find a servicing solution.
* Incompetent technicians can't solve problems like professionals which caused future issues in that product.
* Too much time consuming.
* Customers can't get any security from them how long it works.
* Service providers charge as much money they want for a simple solution.
* People don’t have an idea what's going on that’s why they are bound to provide the service charge which is unfair.

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1. **Proposed objective**

In this research based project we want to develop an Android base application and a web application that provides electronic and home appliances services. We initially thought a name for our app “ALORON”.

1. By this application people can hire technicians when they faces any sort of difficulties with their AC, TV, or any types of electrical products.

1. We want to provide a solution where people don't need to go out door to door to find a servicing solution. User can simply register their problem and then we will send a technician to solve the problem.
2. We intended to develop an android app as well web application service to make things easier for our users.
3. People can also Buy and Sell their second hand product into our app.
4. People can repair their Car, Bike and Electric vehicle by our application.

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1. **Methodology**

We want to develop an android app and a web application for this service:

1. For mobile application: We have use React native. It’s a JavaScript framework. We know its very difficult to make an android and a ios app. We will need two team to manage our app. It’s time consuming and costly process. But in React Native we can make app that will run both on android and ios device. And we easily deploy in into the Playstore and App Store.
2. For the web application: We have use React framework. Again its a JavaScript framework. It is now one of the most trending framework to build a website. As our main app will build on JavaScript that’s why it will be easy for us to learn one language and implement it on different area.
3. For the backend: We have use Nodejs. It’s a JavaScript run time environment to run JavaScript into any machine like Computer or mobile. It will help us to make good backend for our application as well as for the web app.
4. For the database: We want to use MongoDB. Although we have not fixed it yet. But after analysis our customer data and all the date we will use in our app, then we will decide weather MongoDB is good for our app or we need to shift into MySQL.
5. **Proposed Solution**
6. People will not face any hassle when there electrical product are damaged or needs to repair.
7. They don’t need to find any service point or take the product to that service center to fix it.
8. Expert can solved the problem more professionally as compared to local technicians and customer can get up to 1 year service warranty from the app.
9. Sometime service center charge as much money for a simple solution and people don’t have the idea what's going on. However in this apps service charge are fixed and updated in the website. That’s why they are bound in any unfair charges.
10. For the second hand product our team will ensure its quality and we will give additional 6 month service warranty for that product.
11. **Conclusion**

We want to develop a user friendly app on product servicing for the consumer in our first version. Then we’ll add other services in a different interval to create a supper.

1. Car, Bike and Electric vehicle servicing.
2. Second hand product buying and selling
3. House, furniture renovation.

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