

e-HomeService: A tool for linking Service Providers and customers

Using USSD and webRTC

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Introduction

The e-HomeService is a USSD (Unstructured Supplementary Service Data) and Web-based application which provides service for essential needs in our day-to-day life, such as repairing electrical and electronic repairs, plumbing, temporary assistance for cooking, etc. We have developed a system to assist homes to fulfill such as essential need.

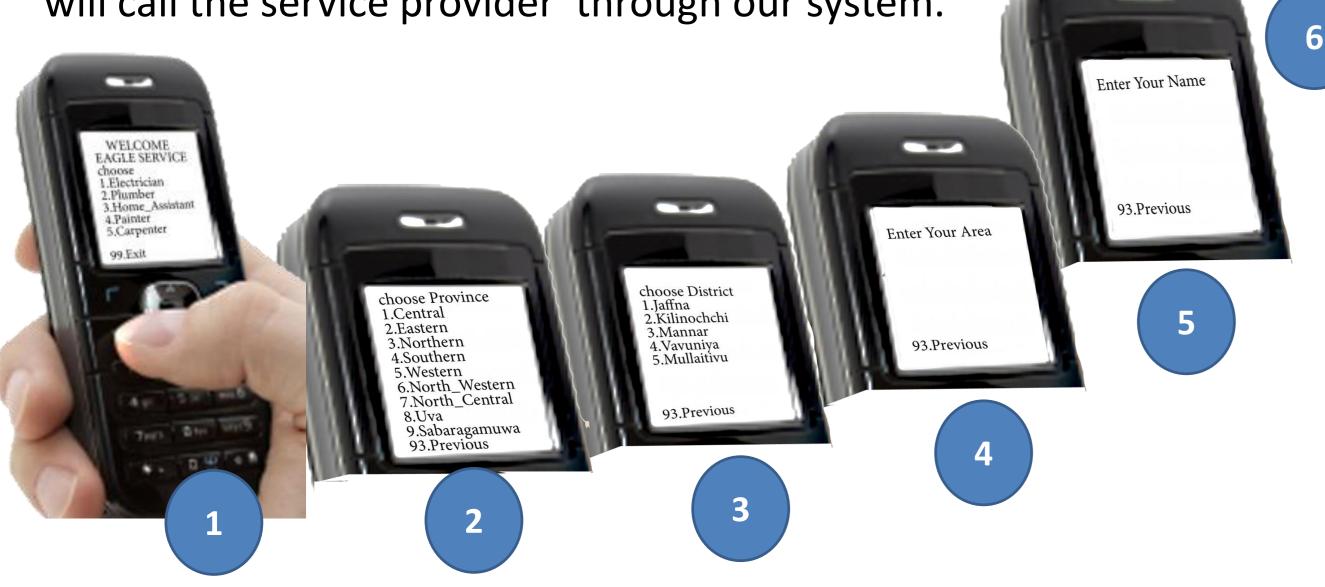
On the other hand, there are skilled person who undertake repairing, plumbing, cooking tasks that are not directly linked with those home needs.

The proposed system bridges the contact gap between those house and service providers the system recommends the home with the appropriate service provider based on the geological information.

USSD Based application

In our USSD based application the service provider (plumber, electrician, painter, etc) can register themselves through their mobile Phone.

In Case a customer needs a service provider, he/she will call the service provider through our system.



Why are we best?

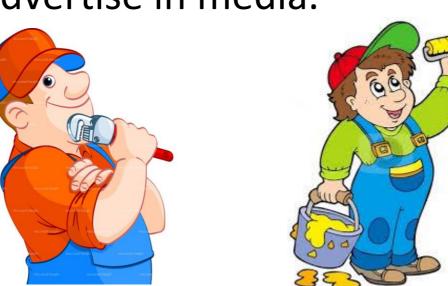
- **❖**Instance solution.
- Does not require smartphone for subscription.
- Customers can find solution with a single click.
- Customers have more option.
- The service provider have more customers.
- The service provider will reach the home quickly.

Real World Problem

Difficult to find customers.

Service provider

- They can be hired only from their area.
- They can not afford to advertise in media.



They don't have enough option to choose service providers.

At present, they are receiving service providers from a short proximity.

Customer



A Typical Scenario

Centralized database Custome WebRTC Subscriber | Was

Call to service provider using webRTC

Conclusion and Future work

- The USSD supports English, Sinhala and Tamil languages.
- *We have planned to include customer rating for each and every service provider which makes the service more reliable.
- On the other hand, the service provider will also leave the feedback.
- Customer also can access the service using USSD.
- Automatically find nearest service provider using LBS (Location) Based Service) and suggest to customers.

System overview







USSD based

Service provider can subscribe to our USSD service, then they can add their details through our system.

Web-based

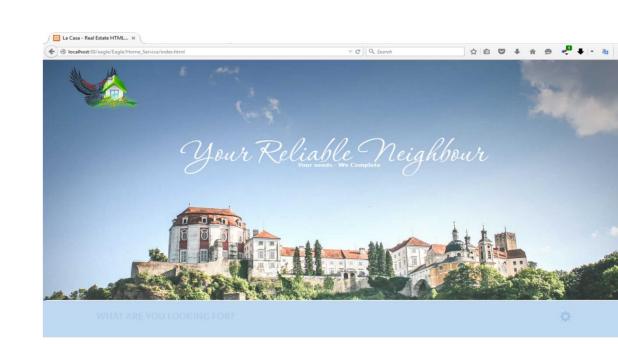
Our web-based system will publish those service providers who have subscribed in our system.

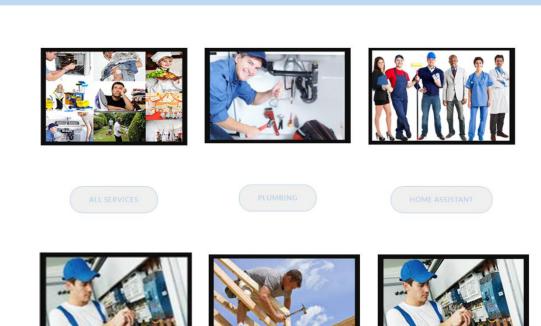
webRTC based

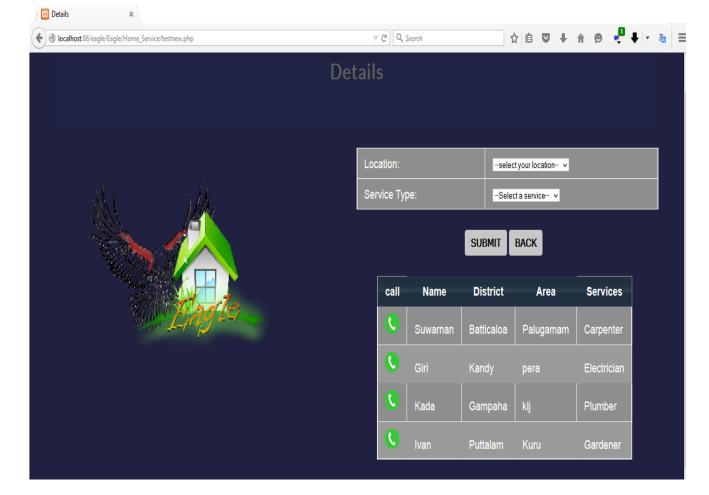
Customer find out their suitable service provider to solve their problem.

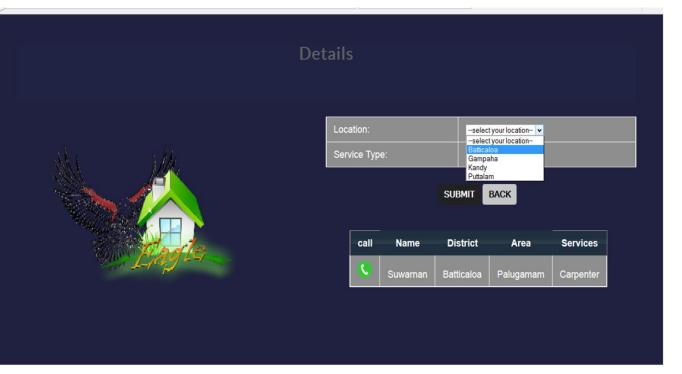
Web-based and webRTC application

In our web-based application, customer who are in need of home services can search the appropriate service providers and can call them immediately through our webRTC application.









Acknowledgement











