

**Department of Computer Science and Engineering**

**Project Proposal for CSE499**

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**Project Proposal**

**Project Tittle: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Project Summary:**

Bangladesh is going to be a digital country. Digital means, all work and activities are done by using internet, but we can’t use it properly or there is many lack of facilities. We use many emergency or hotline number for many services like hiring ambulance, report on cleaning to city corporation, report on crime to police etc. That time we are calling hotline number for get those types of services, and we pay the call charge or will pay the service provider. Sometimes, we face a trouble because service providers can’t identify our accurate location. We think about this situation and try to find out an easy solution. Now 7.3347 Cores (BTRC Statistic) people are using internet in Bangladesh and day by day is going to be high. So, we are planning to develop a mobile application on those services.

City corporation will be working very closely to make the city Clean, Livable and Vibrant for the present and the future generations. Already many NGOs working on cleaning the wastes with city corporation, but they can’t notice all places or sometimes their staff didn’t work properly. That reason many road and dustbin becomes dirty. In Eid al-Adha, animals are sacrificed at Qurbani by Muslim people. That time roads become very dirty by Qurbani wastes. City corporation is taking many steps to clean up these wastes and they cleaned waste. Sometimes, they miss some area to cleaning, because they can’t scan all areas. This area spreads dirty smell of wastes. On the other hand, they are messaging all people and give them a hotline number for complain about to city corporation, but this is irritating. We try to solve this problem through a mobile application. Users don't have any account. Just service provider will create an account. When users see wastes on road or any area they just open our application and select cleaning category and take a picture then send a request to service providers. On that time, users send the GPS location with the request, and all service providers will see the request and navigate with users sending location. When one service provider accepts the request then other service providers will be see this request accepted by the name of service providers, and they clean up this place. It is very easy way better than calling system.

Now crime number is going to be high in Bangladesh, like murder, eve teasing, Corruption, fighting etc. Sometimes, we see many crime video or picture on Facebook newsfeed or other social media. When a crime occurred, People taking video or picture and upload on social media. People do not have police phone numbers. So, they don’t report to police about the crime. In some situations, people don’t even want to report because they are afraid of being exposed. Police don’t notice always on social media. If our application is live then people open our application and report to nearest police with select crime category, attached these videos or picture and GPS location. It’s very helpful for police to take immediate step against this crime and many criminals could be caught easily. Mean time reporter’s identity has been kept safe.

Peoples need an ambulance on emergency. Ambulance service providers has a hotline number for contact with them. Sometimes, we can’t reach to them because phone call is busy. For these reasons, we develop this application. Here, Users open our application and select they ambulance type (ICU or Non-ICU) and send a request to nearest ambulance service providers.

Firstly, we develop a backend to control all our services. Then we will develop a web application for service providers and cross platform mobile application for service seekers. Service providers also use this mobile application for better benefits.

**Project Objectives:**

* Only Bangladeshi users access.
* All hotline number services turn into this application.
* Reduce hotline number services.
* Make sure communication without call-charge.
* Make the city clean.
* Reduce crime.
* Get ambulance on emergency.

**Project Methodology:**

In this project, we are going to follow nondependent pattern for developing the whole project. To achieve this, we will divide our development process in three separate parts.

First part is backend and we use ASP.NET Core (Redesigned from ASP.NET) Web API for it. We will use this platform to make sure our back end is not coupled with any client-side applications. This will give us a clean freedom over modifying our backend with being tensed about any client sides.

Second part is web application and it will be creating with AngularJS (Framework of JavaScript). This web application will give service providers a way to sign up and monitor reported issues. We will use AngularJS (Framework of JavaScript) to make the best use of MVC pattern, and keep website free for changing whenever needed. This will ensure a better control on our work.

Third part is Cross Platform mobile application and it will be creating with Xamarin Forms Application (Framework of C#). We will use Xamarin to make sure this available to every major platform with minimum possible afford.

**Essential Tools:** Visual Studio 2017 Community Version.

**Features for Users:**

* Don’t create account.
* Submit report to get services.
* Pay only Internet charge.
* Send feedback about their opinion.

**Features for Service Providers:**

* Must be Registered and Logged in.
* Reduce money cost.
* Pay only Internet charge.
* Give better service to people.

Here, we have explained some problems of hotline services, and explained how to recover them easily through this application. In future, we will provide all the services to public instead of hotline number through the application.