Fingerprint mobile Voting system

Assignment 1- Project Proposal

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Course: Software Engineering [B]

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Overview:

Voting is the right of each citizen to cast the vote and elect their leader. Bangladesh is a democratic country and each citizen has the right to vote and elect their leader. People also have the right to change the ruling party in upcoming election by voting for the candidate. Voting is not done to elect the government leaders, but also conducted to elect the leaders in schools, colleges, banks, society etc. Biometrics is a way used to recognize a person based on his physical nature. The fingerprint, iris, face, voice, etc. are the mainly used biometrics to recognize a person.

There are two key functions for biometrics, first is one to one matching and other is one to many matchings. In one to many matching the biometric sample is compared with the already stored sample. Biometric method results in a faster security, and more convenient method for user verification. Biometric method is better than password security. Fingerprint is unique for each individual so it can be used as a mark of signature, verification and authentication. Fingerprint is the biometric which is used in this project.

 Finger-print will be different for each individual. In this project, fingerprint is used for the authentication of the user and allows him to cast vote based on his fingerprint image.In one to many matching to recognize a person we have to store a person Image,Facial structure and voice.Traditionally voting was done by marking with stamp casting vote for the corresponding candidate and then dropping the paper to a ballot box. To calculate the number of vote each vote must be calculated in each ballot box and then sum all the votes for each candidate and candidate who secured largest vote will be selected as the winner but in fingerprint system it'll automatically calculate the votes and declare the winner.This mobile app can be used anywhere in the world.First citizens need to give voter id after matching there will be sensor option to match someone finger image.If matching happens then he can able to see the voting options page and cast the vote.If fingerprint not matched voter can open camera and give a instant photo and cast the vote.If both system fail then voter can request a ballot paper softcopy. after completing the page voter have to send it by email at their own election office.

Similar Software Systems:

Electronic voting machine is used nowadays for polling vote. Electronic voting machine consists of two parts: one is control unit and other is balloting unit. The control unit is controlled by the presiding officer and after the verification; voter will be allowed to poll his vote. The balloting unit is inside the voting compartment. When the verification is completed by the presiding officer, he presses the ballot button then the voter can cast his vote. Voter use the button against name of candidate which he wants to vote. In the existing system voter needs to carry his ID card for verification. The presiding officer will check with the list and ID card for verifying of the voter. This is time consuming. At the end of voting all the EVM will collected and submitted to counting center and the selected government employees will count the vote and finally publish the result.

Main problem is one can change the program installed in the EVM (security problems).Anyone can manipulate the result.

Goals:

1. Develop a mobile application that allows every citizen or person to cast their vote from anywhere in the world.

2. Offer alternative options of voting.

Why this application?

1. vote is a sacred duty of every citizen. Country's future depends on it.
2. Everyone able to cast their vote.
3.No available application in the market.

Objectives:

1. New UI framework for creating great mobile apps
2. High-performance 2D and 3D graphics
3. Enhancements for enterprise
4. Compatibility with existing apps
5. Release a beta for the testers.

Modules:

The "**mobile voting app**" will be developed with the general citizens in mind. It will be constantly maintained and modified along with the changes in the industry. The design and development process will be executed incrementally. There are a few modules in this app

Modules	Description
Constituency level database Handler	This database will be able to view data pertaining to voters and politicians within the respective constituencies.
General or main level Database Handler	This database in the Architecture is called the General (or main) Database. This database is like a watchdog. It monitors the validity of the information it captures like the Fingerprint and Voter id.
voters authentication Handler	Handles all the voter fingerprint and voter id.
casting votes Handler	this handler show the voting option correctly .after casting the votes store the vote and calculate.announce the winner.
DatabaseHandler	Stores and handles the data
Security Handler	main the process so someone can not hack or manipulate the system.

Scope:

As a self start-up every aspect of the software (i.e. Design, Hosting, Security, User Privacy, Testing, Data) is in scope of the developer(s). They are solely responsible for any modifications of the software.As every citizens data keep changing everything needs to be up to date.

Deliverables:

A complete mobile application with proper documentation and database schemas help files.

Risks:

1. Unpredictable result in spite of thorough market research.
2. Government cannot offer enough money.
3. Changes in government policies regarding of the voting.

Any of the above mentioned factors may cause delay of the development or even abandonment of the project.

Milestones and Reporting:

Total estimation of man hours: 250

Tasks	Reporting	Hrs	Date
1 – Analysis(COST 100000TAKA)			
Analysis and design stage, gather data and create system mockup	None	30	15/06/2021
Architecture design	None	10	17/06/2021
Design work plan (distribution of tasks to development teams)	Client meeting to review work plan	12	19/06/2021
2 – Development (COST 1000000 TAKA)			
Create database	None	10	20/06/2021
Import existing client data	None	10	22/06/2021
Clean data	None	10	23/06/2021
Create GUI	Client meeting to review GUI	30	26/06/2021
Integration with smartphone network	Email report	10	05/07/2021
3 – Testing(COST 100000 TAKA)			
Alpha testing smartphone application (Closed)	None	45	15/07/2021
Open Beta	Client meeting	23	22/07/2021
Finalise documentation	None	50	30/07/2021
4 – Deployment(COST 50000)			
Deployment to App stores	None	10	10/08/2021

TOTAL COST= 12,50000 TAKA

Signatories