CSE 310 Project Report

1. Project Title:

Online Voting System

2. Project Members:

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3. Project Github Repository Link:

https://github.com/sakalbd/Online-Voting

4. Objective:

Our objective is to develop an online voting system where people can from anywhere without coming to the voting place. For that there are objectives for example: reviewing the existing voting process, coming up with automated voting system, implementing an automated Voting system, validating the system to ensure that only eligible voters are allowed once a time.

5. Motivation:

Nowadays, there are tons of things we do online, from shopping to doing any kind of official arrangement, traditional voting, that makes voters go to a specific place at a specific time in order to vote, online voting allows them to cast their vote at any time of the day and from any place. When running a voting online, you avoid the need for all the physical infrastructure usually required on a traditional voting. No need for paper, printing, physical urns or staff. Since the tally in online voting is run by machines, you can assure that it will not have human counting errors and that it will in most cases run faster than a count carried out by persons, so the results of your election will be available sooner.

6. Critical Challenges:

Maintaining its security and making people understand that it is the trustworthy online Voting System will be a critical challenge for us now.

7. Conflicting requirement:

Making the user acknowledgment and agreement policy so that user get information about what data are being collected.

8. YouTube link of project demonstration:

https://youtu.be/JPhz73TgNSw?list=PLBcTkX3tyAsFuS2fcJrFKsTToJcklSD42

9. How Ks are addressed through the project:

Ks	Attribute	How **Ks** are addressed through the project
K1	**Science:** theory-based understanding of the natural science applicable to the discipline	To make this online voting system we need to make such a platform where people cannot vote more than one time, trying to vote for several times can lead a person to jail.
K3	**Eng. fundamentals:** A systematic, theory-based formulation of engineering fundamentals required in the engineering discipline	This project needed to have very strong security system as voter's private information could be stolen. So we had to plan systematically the whole system. Our engineering knowledge helped us a lot.
K5	**Design:** Knowledge that supports engineering design in a practical area	For this project we had an ER diagram, from that we made database system and we also used some function to system.

10. How Ps are addressed through the project and mapping among Ps, COs, and POs:

Ps	Attribute	How **Ps** are addressed through the project
P1	**Depth of Knowledge Required:** Cannot be resolved without in-depth engineering knowledge at the level of one or more of K3, K4, K5, K6 or K8 which allows a fundamentals-based, first principal analytical approach	This project needs the study of related works having the same goal like our project (**K8**- research literature), designing the project with user interface and software experience, (**K5**- engineering design), fundamental to use among various choices to ensure sustainability (**K3**- engineering fundamentals), decide which Computer engineering fundamental to use among various choices to ensure sustainability and we have to learn some voting law (**K4**- specialist knowledge), Developing Website and App for the project (**K6**- engineering practice).
P3	**Depth of Analysis Required:** Have no obvious solution and require abstract thinking, originality in analysis to formulate suitable models	We had to rethink every step that we followed for this project as it needed to study many documents. We had to ensure that our project is just suitable for every kind of people even if they are not used to vote through online system.
P6	**Extend to stakeholders:** Involve diverse groups of stakeholders with widely varying needs	Diverse group of stakeholders (usually all the citizens of Bangladesh) will be benefited by this project.
P7	**Interdependence:** Are high-level problems including many components parts or sub-problems	Project involves two subsystems mainly: 1. Application model 2. Hardware model [for Casting vote] 3. Data analysis on the inputs and output (real time data [Nid]) of this project

11. How As are addressed through the project:

As	Attribute	How **As** are addressed through the project
A3	Innovation: Involve creative use of engineering principles and research-based knowledge in novel ways	The platform needs to be updated with innovative plans like adding more options for normal people like universities, offices and for others to make their own polling system.