**Project Proposal: SDS Labs Winter of Code (WOC) 2023**

**E-voting system implemented on Ethereum blockchain**

**Personal Information**

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**Branch: - Electrical Engineering**

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**Coding Skills**

* **Fluency in C++ with sound knowledge of OOP.**
* **Command over HTML5, CSS3.**
* **Sound knowledge Bootstrap, Node.js framework.**
* **Basic working proficiency in solidity, JavaScript and MongoDB.**

**Development Environment**

* **Ubuntu 22.04 LTS**
* **Microsoft VS Code**

**Project**

1. **Introduction**

* **The aim of the project is to develop a system implemented on blockchain through the tedious process of voting can be done online freely and fairly.**

1. **Use Cases**

* **E-elections will make it easier for citizens to cast their votes as they will be able to do so from the comfort of their homes.**
* **It will take care of various malpractices used in elections such as EVM manipulation, booth capturing etc.**

1. **Skills Required**

* **HTML5 & CSS3: - Used for developing front end of the website.**
* **Bootstrap: - To fast pace the development of front end.**
* **JavaScript: - A scripting language to be used in the front end to program the behaviors of web pages.**
* **MongoDB: - To create Database where user data will be stored.**
* **Node.js: - To be used in backend for creating servers.**
* **Solidity: - Used in creating smart contracts and use in backend too.**

1. **Timeline**

**14 Feb – 20 Feb**

* **Creating front end part of the website.**
* **Designing UI of the website.**

**21 Feb – 23 Feb**

* **Creating Databases.**
* **Creating Smart Contracts.**
* **Setting up tools like MetaMask and Ganache.**

**24 Feb**

* **Giving final touches before Mid-Term evaluation.**

**25 Feb**

* **Mid-Term Evaluation.**

**26 Feb - 9 Mar**

* **Completing Backend part of website.**

**10 Mar – 11 Mar**

* **Interlinking everything together.**

**12 Mar**

* **Final Evaluation.**

**P.S.**

**I am planning to stay at Roorkee for the entire month of February and can easily take out 7-8 hours a day due to the ongoing ETE vacations. After February hours may decrease a little due to commencement of classes but due to all learning being done in early phase it won’t be difficult to achieve my deadlines.**

**About Me**

**I am a 17 year old, first year student currently enrolled in Electrical Engineering course at IIT Roorkee. I am fairly new to development and programming in general but developing things to solve problems fascinates me therefore winter of code is providing me an excellent platform to explore my interests.**