

EECS 581 TEAM 14
INITIAL PROJECT DESCRIPTION

BLOCKBALLOT

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Zach Davis
Tim Fox
Hirsh Guha
Benjamin Streit
Tanner Strickler

SYNOPSIS

Web-based voting application providing complete anonymity and decentralization by leveraging blockchain technology. BlockBallot is to be used in any polling scenario where transparent and trusted results are vital.

DESCRIPTION

This project is addressing a direct need that our election process currently faces. Our current voting procedures are outdated and inefficient. Our product fixes this problem by offering up to the second voting results. Our election processes also deals with the issue of voter turnouts. Our product delivers ease to access and dramatically increases voter turnouts. Our product delivers a robust security stack to ensure election integrity.

Creating such a platform is as versatile as it gets, from private groups to the federal elections, BlockBallot provides speed, efficiency, usability, and ease of access at every stage in the election process - assigning candidates, voting, etc.

The deliverable should be a fully developed platform that allows a user to login, secured by their hashed SSN to create a unique voter ID. Their vote will generate a reference number that will be added to the block chain, and ensure accuracy of their vote. Because accuracy is of the utmost importance, it is vital that voters are capable of ensuring that their vote was counted correctly. In order to keep a paper trail, a backup server will constantly keep updated backups of the chain. Votes will be processed and able to be visualized within minutes of their submission.

MILESTONES

Fall

- (i) (November 10) Setup cloud infrastructure.
- (ii) (November 28) Install all necessary software.
- (iii) (December 18) Setup blockchain.
- (iv) (December 18) Setup front-end demonstration.

Spring

- (i) (February 28) Set up data processing.
- (ii) (March 28) Set up front-end.
- (iii) (April 16) Set up data visualization.
- (iv) (May 9) Deliver working model.

BUDGET

Item	Projected Cost
Amazon Web Services (AWS)	\$150.00 USD per month of uptime

WORK PLAN

Member	Role
Zach Davis	Server Infrastructure
Tim Fox	Data Processing and Blockchain Management
Hirsh Guha	Front-end and Back-end Engineer
Benjamin Streit	Front-end Engineer
Tanner Strickler	Security and Front-end Engineer