

Requirements Specification

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I. Introduction

- **Purpose of the system**
 - The objective of this project is to produce a universal voting platform for students.
- **Scope, objectives, and success criteria of the system**
 - It will consist of supporting various contests consisting of multiple candidates. JSVS will allow students to register to vote through a secure system that limits ineligible voters and ballots.
- **Definitions, acronyms, and abbreviations**
 - JSVS - Jaguar Secure Voting System
- **References**
 - Stakeholders, student body, faculty members, the public community
- **Overview**
 - To improve upon the current voting system in place at the University of South Alabama.

II. Current System

- Student body is currently utilizing an email method through google poll as a voting system.

III. Proposed System

- **Overview**
 - Our goal is to create a functional app that will allow students to cast their votes easily on a handheld device.
 - **Proposed System**
 - **Functional Requirements**
 - The system must allow users to be able to log with their JagID and password.
 - Once the user presses the confirm button, the system must be able to confirm successful ballot submissions.
 - **Nonfunctional Requirements**
- Usability -
1. What will the voting system interface look like?
 - Adaptable to different mobile devices and easily readable

This is a very thin set of functional requirements. There should be detailed comments on what the user needs, written in prose.

Looks like there are functional requirements mixed in with non-functional requirements

2. How will voters access this system?
 - Via handheld app or voting station
3. Who is this system made for, will it only be exclusive to that specific group?
 - USA students, faculty, and staff, with the focus on students.
4. What exactly do you want to achieve in this system?
 - Implementation of a complete, fully documented voting system
5. How many people will be featured in the polling at maximum?
 - ~20k

Reliability (robustness, security, safety) -

1. Why are you looking to change how you are currently voting now?
 - To increase participation and voter confidence in outcomes and privacy.
2. How will user data and inputs be treated?
 - Every user's login and votes will be kept private from other users.

Performance -

1. How long does the system take to respond to user input?
 - Optimized for most devices to smoothly operate the system

Supportability -

1. In what form of method do you want updates and bugs resolved?
 - We want the user to be able to easily retrieve updates from the source (our team) and have the option between automatic updates and manual updates.
 - We will have to make sure this is integrated between different application management systems such as the IOS AppStore, Google's PlayStore, etc.
2. In what way are we supporting international students?
 - Make sure the information is easily digestible for any type of persons
 - Make sure we support multiple languages.

Implementation -

1. What platform will this system operate on?

- Via handheld app (Probably only APK or Google Play Store at first)

Interface -

1. Where will our inputs/outputs come from?
 - The system's we'll be interfacing with will include the database for storing registrant information, as well as candidate and ballot results. We'll also need to interact with the voter registration system for registrant validation.
 - Our outputs will be the users' mobile devices and the previously mentioned databases.

Operation -

1. What are the constraints that this voting system will perform within (people, environments, technology, etc..)?
 - Stakeholders: USA network, Computer Center, student government, faculty government, Deans, Chairs, VPs

Packaging -

1. How should a user receive our application?
 - A user will either access the application via a web page or a dedicated app that will be delivered via APK (or google play) connected to that web page.

Legal -

1. Should this voting system be exclusively only licensed to USA associates?
 - Yes

- **System Models**

- **Scenarios**

There are many scenarios that must be considered:
Authentication failure, multiple selections, etc.

Is there an administrative function that must be accomplished, e.g. importing and validating ballot styles for each contest?

Voting for a Candidate

1. User enters login info into the app.
2. System authenticates the login.
3. System displays the available candidates.
4. User chooses and submits a vote for his or her chosen candidate.
5. System confirms the vote.

Alternative: Authentication failure

At step 2, System fails to authenticate login information.
System displays a login error.

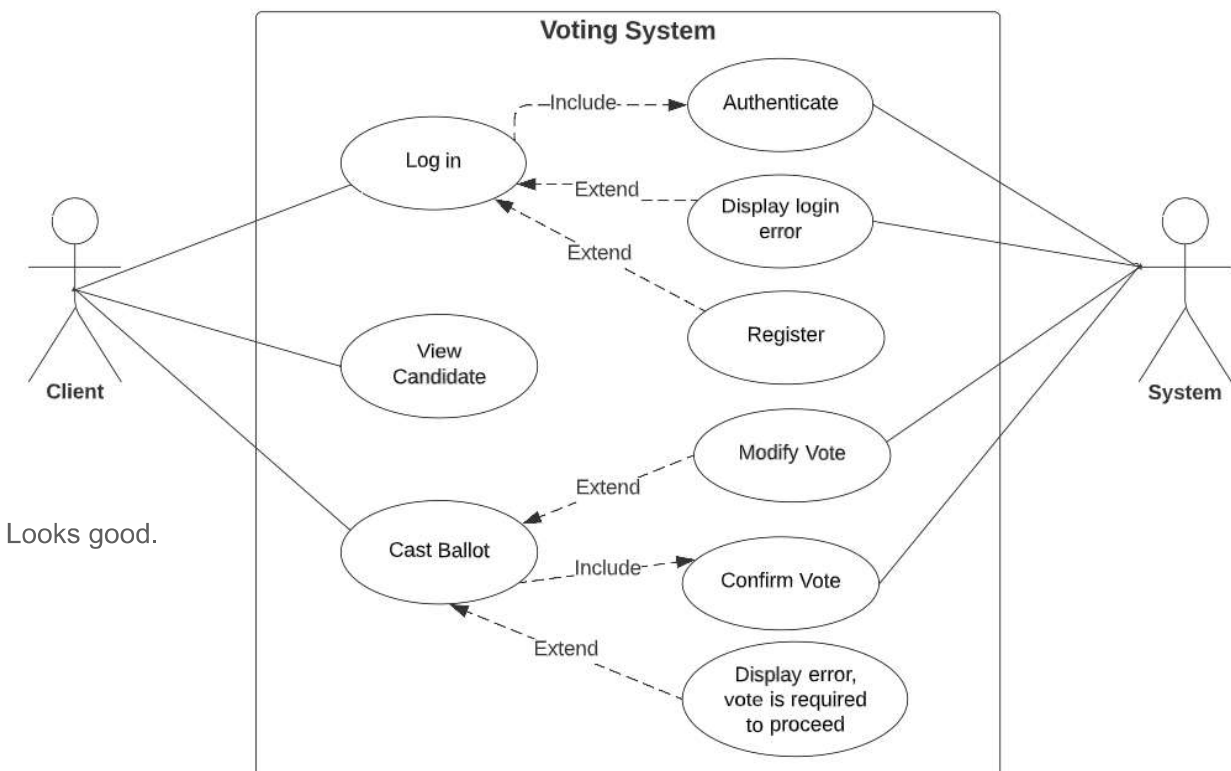
Allow the user to re-enter their login information.

Alternative: No submission

At step 4, User doesn't choose a candidate before pressing Submit.

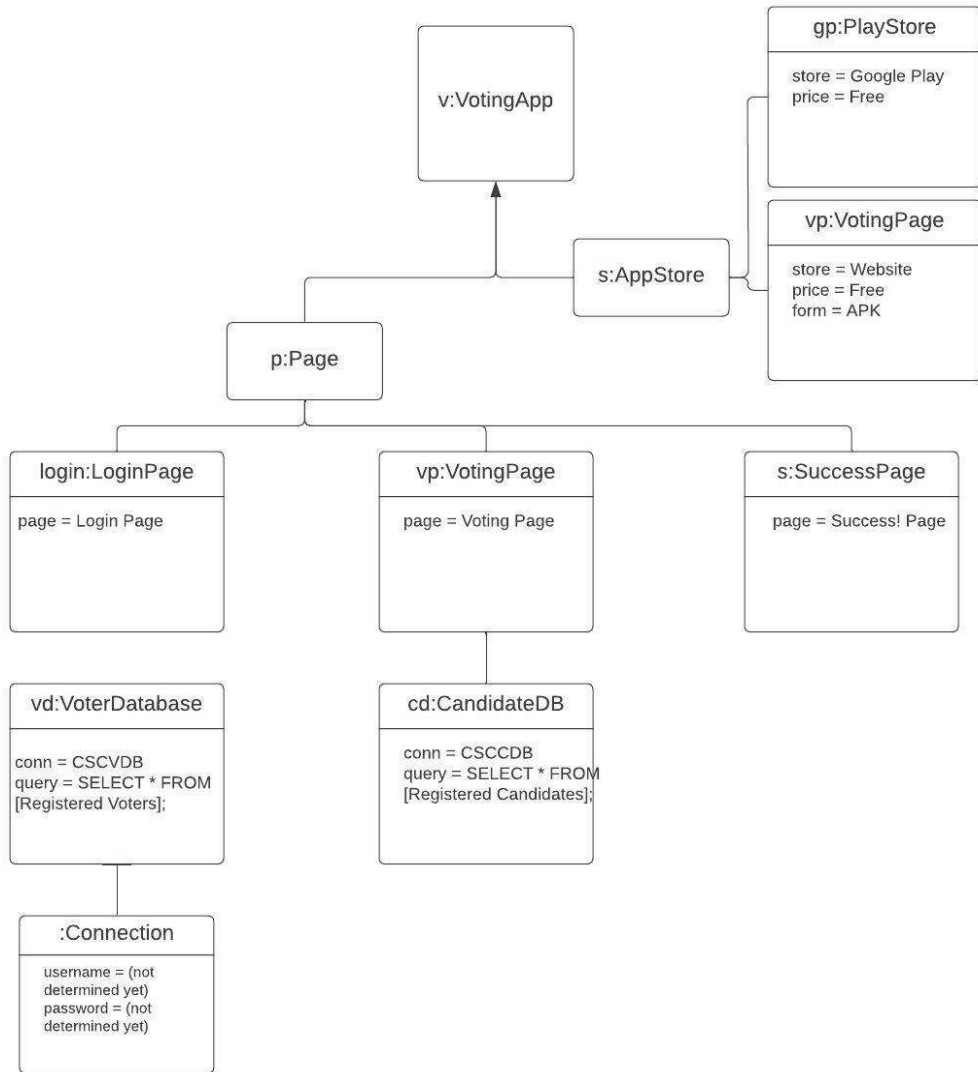
System displays an error, prompting User to select a candidate.

- **Use Case Models**

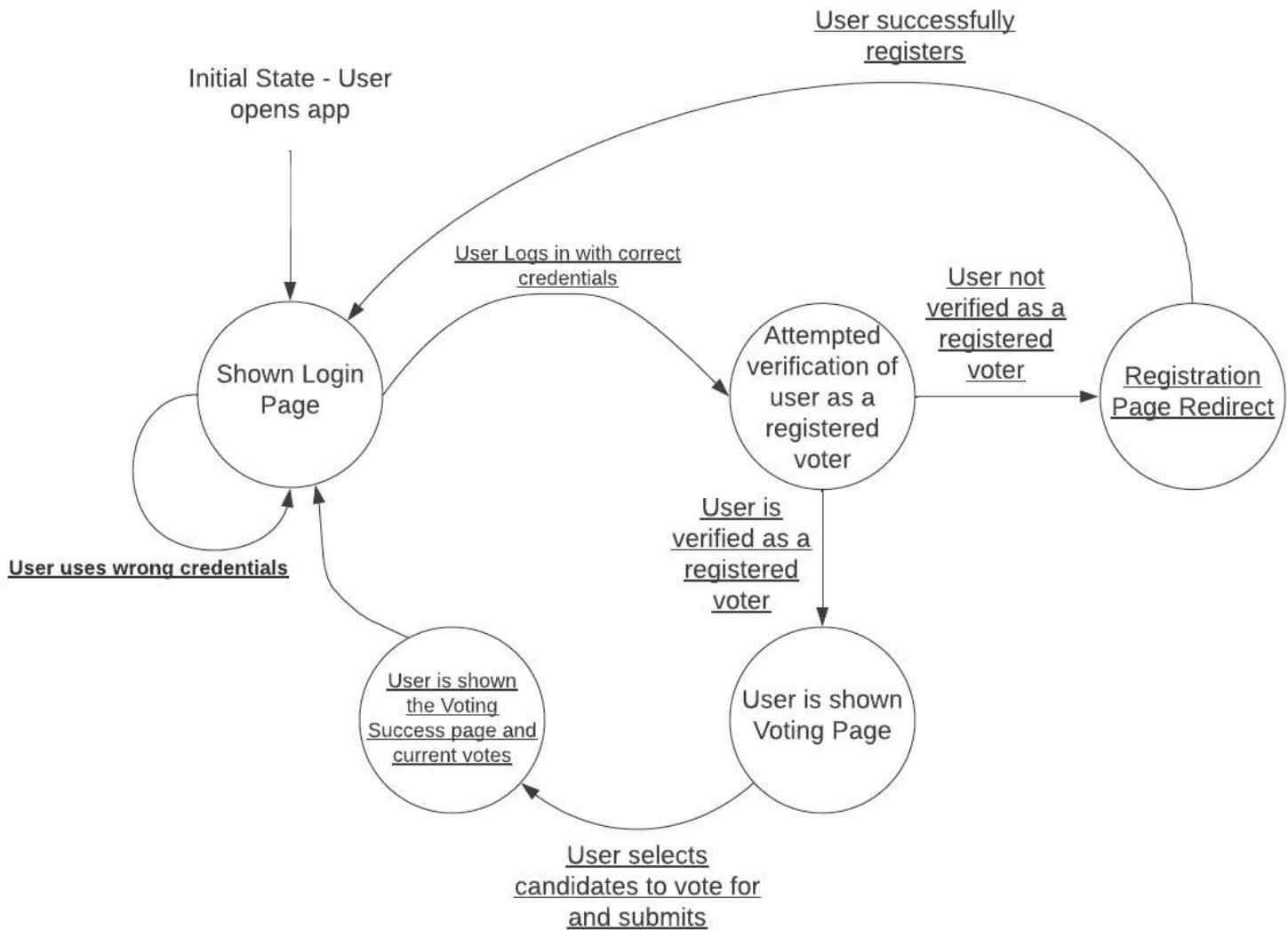


○ Object Model

Do you need a "contest" object?



- **Dynamic Model**



- **User Interface - registration/login screen, ballot screen, successful submission screen**

**Welcome
to
Jaguar Secure Voting System!**

REGISTER

RETURNING USER

REGISTER

FIRST NAME

LAST NAME

JAG ID

MAJOR

LOGIN

JAG ID

PASSWORD

- ☐ REMEMBER ME
- ☐ FORGOT PASSWORD?

CANDIDATES

PLEASE SELECT ONE OF THE OPTIONS BELOW:

- ☐ CANDIDATE #1
- ☐ CANDIDATE #2
- ☐ CANDIDATE #3
- ☐ CANDIDATE #4
- ☐ CANDIDATE #5

SUBMIT

**Your vote was
submitted.**

