**Functional Requirements Document**

**Election Platform**

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| --- | --- | --- | --- |
| **Version** | **Description of Change** | **Author** | **Date** |
| 1.0 | Add some basic information | Xinyu Liu(Nick) | Oct 9, 2019 |
| 1.1 | Update the diagrams for functional requirements | Xinyu Liu(Nick) | Oct 22,2019 |
| 1.2 | Update the diagrams for different pattern and more details for function requirement | Xinyu Liu(Nick) | Nov,27,2019 |

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* **INTRODUCTION**

Election platform website is a web platform to show the candidates’ information and anonymous citizens opinions.

* **Purpose**

The purpose of platform is gathering the candidates' information and show to the users which try to help users participate the elections.

* **Scope**

The document will show logic graph, architecture diagram and UML diagrams.

For the election platform system, anonymous users can express their comments for different candidates though the website.

* **Background**

The election platform developer team is a group of university students which try to build a greater voting environment for the election.

* **References**

Meeting summaries, interface sketches, activity diagram for logic and data diagram for the website.

* **Assumptions and Constraints**

The platform requires lots of official data and try make sure all the information in the platform are not bias, otherwise it will affect the public trust of the platform. Also, security of the platform is really important to keep users to be anonymous.

* **Assumptions**

It assumes that it is available for us establish a web and have a web server, and it is legal to build a general election platform and have comments. Moreover, offical data that we find is not bias.

* **Constraints**

One of the constraints is hard to prevent the comments to be bias which make the platform have lower public trust. However, our site will figure out ways to limit the bias.

* **Document Overview**

The document begins with basic conception of the election platform. Then it shows the different type diagrams which reflect whole platform’s logic and date flow.

* **METHODOLOGY**

The platform is built on the website. There is an activity, UML and data diagram to help users to understand the platform.

* **FUNCTIONAL REQUIREMENTS**
* **Context**

This is an activity diagram which show basic logic of the platform system. It begins with the index page, then users can directly check the different pages. For the election page, there are several candidate options for user interact.

**Exhibit 2 - Activity Diagram**



* **User Requirements**
* Users want to comment or show their opinions for the candidate.
* Users want to see most meaningful opinions which can help them to make better choices.
* Users want to know more information about the candidate.
* **Data Flow Diagrams**

For the data flow diagram, it is divided into three parts which are view, controller and model. Users interact with the view part which is consisted with HTML and CSS files. According to users’ action, view will send the request to controller. Then controller will process the request by the PHP and JavaScript files and form view to users. Controller also can request necessary data from the model which is web database.

**Exhibit 3 - UML Diagram**



* **Logical Data Model/Data Dictionary**

For the data diagram, there are three tables to record the all data. Candidate table record each candidate basic information, achievement and links to their own page which is related to the election table. Election table records each election’s date and session. For last table, feedback table is users’ feedback from the website. There is a various' type after each various.

**Exhibit 4 - Data Diagram**



* **Functional Requirements**
* Space of data
* Web address
* Public source
* **Functional Requirements Group 1**

**Exhibit 5 - Requirements Group 1**

|  |  |
| --- | --- |
| **Section/ Requirement ID** | **Requirement Definition** |
| FR1 | The system shall have a database for storing data. |
| FR2 | The system shall have an appropriate web address for the platform. |
| FR3 | The system shall need public source for candidates’ information. |

* **OTHER REQUIREMENTS**
* **Interface Requirements**
* **Hardware Interfaces**

The platform content needs to display on screen and processor to handle the data and software.

* **Software Interfaces**

Software interfaces require browser to handle web files and transfer to the worlds and pictures.

* **Communications Interfaces**

Communications interfaces internet to accept and send the files and require command between the device and the serves.

* **Data Conversion Requirements**

Data is stored in the local servers and arranged by database. Using MySQL query to require data from the database.

* **Hardware/Software Requirements**

The hardware platforms require a screen to show website and processor to process all the logic files.

The software platforms require browser and internet.

**APPENDIX A - GLOSSARY**