

## **Product Requirements Document (PRD) for Voters Guide Improvements**

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### **Project Purpose and Scope**

This project seeks to improve the user experience of the pages and systems used by the Raleigh Public Record in developing the voter's guide with candidate information and analysis stories for both those using the information and those creating the information.

### **Stakeholders**

The Raleigh Public Record  
Professor Benjamin Watson  
Charles Duncan

### **Target Users**

Raleigh Public Record users (end consumers of information)  
Raleigh Public Record journalists (information entry)

### **Use Cases (high level)**

- Journalists add articles about candidates
- Journalists add general information and demographics about candidates
- Users browse list of candidates and view descriptions
- Users select a candidate to view a full bio and articles about
- Users filter candidates by tags (party affiliation, voting history, general demographics, etc...)
- Users search candidates by keywords or tags

## Product Requirements (high level)

- WordPress integration for site hosting.
- An administrative page for journalists to easily add and modify data about candidates
- A unified top level landing page for users to view a candidate list and short descriptions.
  - Should allow searching/filtering and display of results without page reload (ajax page serving)
  - Links to or integrated display of full bio and article list per candidate on demand
- Backend pull data from public records for display/searching
  - For congressional incumbents
    - Record of votes on bills (with pass/fail of bill and party voting rates)
    - Major campaign contributors from previous years
    - Committee membership
    - Bill sponsorship

## Preliminary Architecture Overview

- **Backend**
  - Arbitrary server with MySQL and PHP (whether or not this can be the same as the WordPress server remains to be investigated)
  - Provides REST API for frontend use with all calls returning JSON data
  - Candidate information is stored in MySQL database
  - Periodic cron jobs pull updated public record information from the web and update all candidates with matching data
  - Periodic cron job scrapes RPR site for articles
  - All candidates have
    - Name
    - Description
    - Party affiliation
    - Age
    - Link to image
    - Short bio
    - Links to RPR articles about them
    - Position they are running for
    - Whether they are an incumbent
    - Metadata and position related data
    - Available public record data
- **Frontend**
  - JavaScript based interactivity
  - Runs within a WordPress “page”
  - AJAX interface to the backend REST API
  - Can display all information except existing RPR articles without page reload or URL change

- Provides search functionality to users (creates calls to REST backend)
- Provides an administrative page for use in data entry into the backend
- Provides side by side comparison for competing candidates
- List of candidates for all positions by party or any other attribute

### Workflow plan / Timeline

Date	Completion
4/7/2014	Backend functional spec and API spec complete
4/7/2014	Frontend preliminary design and sketches complete
4/16/2014	Backend core functionality complete

### Evaluation plan / Grading

Minimum feature completion by end of project

- All backend functionality( listed in **Preliminary Architecture Overview**) other than polling of public records
- All user facing frontend is complete and displays properly under ideal conditions

Stretch goals for completion

- backend public record polling for data
- frontend tested extensively
- backend fully unit tested
- frontend provides simple interface for data entry on administrative page

**Document approvers**

<b>Approver</b>	<b>Approval Date</b>	<b>Notes</b>
Professor Benjamin Watson		
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**Document revisions**

<b>Version</b>	<b>Date</b>	<b>Author</b>	<b>Notes</b>
1	4/2/2014	Samuel Fink	Document creation
2	4/4/2014	Samuel Fink	Added preliminary architecture Added work plan / timeline Added Evaluation section content