Sudoku

Project Plan, Rev 9

CMSC 495 (6380) Current Trends and Projects in Computer Science (2205)

University of Maryland Global Campus

Summer 2020 – Professor Hung Dao

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Group 7

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Revision	Date	Description	Contributor
1	5/15/2020	Cover page and revision table added.	Chris Breen
2	5/22/2020	Rough draft created.	Ben Brandhorst
3	5/22/2020	Added project plan and project schedule formats.	Hanan Abdo
4	5/22/2020	Refinement to purpose, intended audience, scope, nonfunctional requirements. Added product perspective, functional requirements, standards compliance.	Chris Breen
5	5/26/2020	Separated Software Requirements Specification (SRS) document into project requirements and project plan per the provided templates. Removed superfluous information.	Chris Breen
6	5/26/2020	Addition of database configuration to schedule and preliminary editing.	Chris Smith
7	5/28/2020	Added hardware specifications for chrome and IntelliJ IDEA	Chris Breen
8	6/28/2020	Removed Internet Explorer from system specifications as it does not support modern technologies used in our design.	Chris Breen
9	7/1/2020	Added concern for Chrome regarding lack of SameSite attribute in header	Chris Smith

1. Requirement Specifications

This web application allows users to play Sudoku in most of the leading desktop web browsers of their choice. A full description of the web application with requirement specifications can be found in “Group 7 Project Requirements”, attached hereto.

2. System Specification

The following developer interoperability and dependency requirements are hereby established:

- Operating System Agnostic
- Integrated Development Environment (IDE): IntelliJ IDEA/PyCharm Recommended
    - Hardware requirements are specific to the IDE, and not unique to the web application being developed. The following system requirements detail the minimum hardware for IntelliJ IDEA 2020.1. Developers should reference system requirements directly from the authors of alternative IDEs.
        - 2 GB of free RAM, 2.5 GB disk space and another 1GB disk space for caches, monitor resolution of 1024x768, any of the following 64-bit operations systems: Microsoft Windows 8 or later, MacOS 10.13 or later, any Linus distribution that supports Gnome, KDE, or Unity DE.
- Project SDK: Python 3.8.3
- Web Framework: Django 3.0.6
- Database: SQLite3
- Version Control System: AWS CodeCommit Git Repository via HTTPS authentication.
- Collaborative Messaging Platform: WhatsApp
- Document Collaboration: Microsoft Word and OneDrive
- Software Development Tool: Atlassian Jira Software Cloud

Critical to the success of any web application is a consistent and user-friendly human-interface across multiple devices, screen sizes, web browsers, and operating systems. According to netmarketshare.com, the current ranking of desktop browser market share for the top five browsers as of April 2020 is:

- Chrome 68.06%
- Firefox 8.21%
- *Internet Explorer 6.68%*
- Edge 6.44%
- Safari 3.66%

Due to the sunsetting of Internet Explorer and the many technologies I.E. does not support, this web app will not run on Internet Explorer.

This web application shall be designed primarily for the Chrome web browser, which comes with the following software and hardware requirements:

- Any of the following Operating Systems (minimum versions listed):
    - Windows XP SP2 w/ Pentium 4 Processor
    - MacOS 10.5.6 w/ Intel Processor
    - Linux: Ubuntu 10.04, Debian 6, OpenSuse 11.3, or Fedora Linux 14
- 128 MB RAM
- 100MB disk space
- Internet Connection
- Chrome web browser

Note: Chrome users may encounter an issue regarding cross-site cookies that lack a SameSite attribute related to the application's LinkedIn badges. This warning stems from recent configuration changes on Chrome's end pertaining to how cookies are handled between different websites.

3. Software Management

This project is hosted in an AWS CodeCommit repository at:

https://git-codecommit.us-east-1.amazonaws.com/v1/repos/CMSC495

Separate AWS IAM accounts have been established for each developer on the team, and those credentials have been privately shared with each developer. Each developer subsequently cloned the project, made changes, committed those changes, and pushed them back to the master/origin branch.

4. Project Schedule

Task	Duration	Start	End	Personnel
Initial Brainstorming and Project Ideas	5 days	May 17th	May 22nd	All Hands
Project Requirements and Project Plan	7 days	May 26th	June 2nd	All Hands
Database Configuration and Table Creation with Ongoing Maintenance	-	May 26th	-	All Hands
Project Analysis	7 days	June 2nd	June 9th	All Hands
Peer Review: Project Requirements and Project Plan	7 days	June 2nd	June 9th	All Hands
Project Design	7 days	June 9th	June 16th	All Hands
Peer Review: Project Analysis	7 days	June 9th	June 16th	All Hands
Project Test Plan and IDC	7 days	June 16th	June 23rd	All Hands
Peer Review: Project Design	7 days	June 16th	June 23rd	All Hands
Sprint 1	7 days	June 23rd	June 30th	All Hands
Peer Review: Project Test Plan and IDC	7 days	June 23rd	June 30th	All Hands
Sprint 2	7 days	June 30th	July 7th	All Hands
Final Sprint Delivery	5 days	July 7th	July 12th	All Hands
Final Peer Reviews	2 days	July 12th	July 14th	All Hands