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CEN 4010-001

16 October 2022

Milestone #2

Section I:

User Requirement

1) The software shall provide users with a secure record of their personal property.
2) The user shall be able to create a secure property account on the software system.
3) The user shall be able to edit their account to reflect their record of personal property on the system.
4) The user shall be able to view the current records in their account
5) The system shall allow the user to search their property records
6) The system shall allow the user to print any or all of their property records
7) The system shall allow users with administrative rights to view all property records for all users
8) The system shall allow users to grant other users access to their account
9) The system shall allow users to download a copy of their property records locally
10) Users should be able to reliably use the system within 2 hours of learning
11) User should be able to view their total property worth
12) Users should be able to leave application feedback

System Requirements

1.1) Access to property records shall be restricted to authorized users.

1.2) The secure record shall consist of property information such as age, condition, buy date, and value.

2.1) The user account created shall be stored to be accessed at another time.

2.2) The user account will be secured with a verifiable password to allow accounts only to be accessed by the owner of the account.

3.1) Each user's record stored within the system should be able to be modified, allowing the user to make any changes to their property accounts.

3.2) I believe there should be a separate page for edits to an entry. This will be activated by clicking on an “Edit” link.

3.3) Upon changing the information for a particular entry in a form field, the user should click a submit button that passes this data to the backend, which will then connect to and update the database immediately.

4.1) The system shall display a record of when items were added to the system and what user they are connected to.

4.2) We will have to take the date/time stamp when an entry is created and store that data in the database.

4.3) This information will be returned along with the other data on a users page.

5.1) The system should allow the user to search and sort their property by date, as well as by price and other attributes.
5.2) We will create separate indexes in the database for each attribute we want to be able to sort by.
5.3) The ability to sort by user should be added to both the insurance and government agency pages.

6.1) The system should be able to compile all records connected to a user in the system and allow the user to easily print them for external use.
6.2) The system will have a function that queries the database for all records pertaining to a user (i.e. SELECT * FROM “database” WHERE user = “blank”) and then stores them in csv format to be printed in a table.

7.1) High clearance IT staff shall have administrative rights to view citizens’ property records, for the purpose of maintenance and resolving user issues.
7.2) This will be done by having separate pages delivered to client by server depending on their clearance level stored in the database.

8.1) The system should allow users to log in through two-factor.authentication, through mechanisms such as phone number and email, as well as requiring authentication checks before allowing users to share their records with others to maintain security.

8.2) To handle the two factor authentication, we will seek out an existing API to perform the verification system.

9.1) The property records should be easily convertible to formats such as PDF, Word, and Excel for downloading.

9.2) The system should allow the user to download and print an unofficial record of their personal property in formats such as word and PDF.

9.3) The system should allow users to download and print an official and approved document containing their records (PDF), which can be presented to insurance companies.

9.4) The system should allow the users to download their records to a spreadsheet in Excel format.

10.1) An accessible user manual should be available for users to download in order to learn the ins and outs of the system.

10.2) The user manual should describe in detail how to effectively add, modify, delete, search, and sort the user’s records.

10.3) The system should have an intuitive user interface that allows the users to use some essential functionalities without having read the manual. For instance, quickly adding property by scanning a barcode.

11.1) The system should allow users to add property values

11.2) The system should allow users to update property values

11.3) The system should calculate the total value of the property, giving the user an overall net worth

12.1) The system should allow users to provide feedback to the system managers in order to maintain the quality of the software application

12.2) The system should allow users to request new services and updates

Section II: Statement on the Developmental Model

Statement on the Developmental Model

For the development of this system, our group agreed on agile development methods. Adopting the scrum methods, we will be able to keep an accurate record of updates to our system through a regularly updated backlog, and collaborate with each other through regular weekly meetings to develop the system. We will also have a scrum master act as a facilitator of the scrums, also updating the backlog with “to-do” tasks. The team will engage in “Sprints”, periods of 2-4 weeks in which increments are made to the software, and the progress will be measured against the backlog.

We chose this developmental model because our development team works well in scrum meetings, and the scrum framework is suitable for advancing design and implementation without too much in the way of unnecessary oversight, while also providing essential documentation of the process in the way of the backlog.