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2020

PROPOSED BY:

HARD MONEY LENDER

CAPITAL

MOUNT WILSON

GOAL: Create a Working Database for a Business

DATABASE MANAGEMENT SYSTEMS

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# Introduction of Hard money lender Database for Mount Wilson Capital

The Database design and development project for Mount Wilson Capital was first

proposed in January 2020. The purpose of the Project is to give Mount Wilson Capital, a Hard

money lender, a database for potential clients to apply for a loan. The Database will help Mount

Wilson Capital to keep track of applications from potential clients. The Database will also

include the applicant’s personal information for review by Mount Wilson Capital employees

and management. Aside from the applicant’s information, the database will also have the

information of the employees who work with and for Mount Wilson Capital. If an applicant

is eventually accepted for a loan, the database will then keep track of the loan amount, the

duration of the loan, and the time remaining for loan repayment. Since the Loan Providers will

have a personal/professional investment in the client’s project, the database will also have the

client’s project information such as the address, any prior experience the client has flipping

property, and so on.

Since the business of hard money lending is dependent on someone’s ability to increase

the value of a property, experience is going to be important if someone is applying for a loan.

Since that is important, the database will give the applicant the option to upload the information

for previous projects as well as pictures of before and after the projects were completed, giving

Mount Wilson capital and loan providers something to look at and evaluate. The Database will

give Mount Wilson Capital the ease of a maintained list of personal and professional information

for employees and applicants/clients.

At current, five students are in the process of designing and building this project. The

database is being built in MySQL workbench 8 with MySQL while the user interface is being

designed and developed in JAVA Swing. This project is being designed and developed for our

Database Management Systems course and will incorporate the tools and languages we as

students know and are learning throughout the semester.



# Business Processes

In most loans the applicants are evaluated based off of multiple elements. The loaner will then have to sift through these applicants to find the most promising applicant to approve a loan with.

Applicants like loan employees will need to provide personal/contact information that ranges from phone number to social security number. The applicant will then need to provide additional information compared to the employee to be able to be evaluated for a loan. This additional information is split up into three different categories which include finances, experience, and property information.

The applicant will provide how they maintain their finances. The applicant will have to provide their source of income which will include a job title, w2 info, assets and actual dollar amount. The applicant must also disclose any prior or ongoing bankruptcies or lawsuits.

The applicant will also need to provide their previous experiences with owning properties. They will need to provide if they have any experience at all. If the applicant has previous experience, they will need to provide details on the previous projects. The applicant may also provide their own reference to a licensed contractor.

The applicant must also provide details about the property in question. The applicant must provide some basic information about the property such as the address, current value of the property, and the acquisition date. The applicant must also provide some more detail information about the property that will include an exit strategy and if the property is being renovated, on what stage of renovation is the property at.

The only other information that an employee will have other than their personal/contact information will be a title within the company and login information. The employee is in charge of approving the most optimal loans that applicants are trying to acquire.

The loan being made between an employee and a potential applicant has its own set of elements if the loan is approved. The loan needs to be labeled with a unique identification number. The loan also needs to be specified as a type of loan. The details of the cost of the loan will include the purchase price, budget for construction. The loan will also include the percent on the purchase and the percent of the construction returned to the loaner. Finally, the loan will need to include a timetable.

# Target Business

Mount Wilson is currently a company of one employee, the owner Tibor. The location of Mount Wilson is in Maryland. The target area for previous sales have primarily been local to the headquarters in Maryland. The target consumer of Mount Wilson is potential loaners that have a reputable background that are about to purchase a property or already own a property. Even though Mount Wilson’s previous sales have primarily been local, Mount Wilson plans on expanding the target area as well as the business. The plan is to expand across the United States for potential loaners.

# User Requirements

# Process Modelling (Entities and their Traits)

Mount Wilson Capital’s employment staff consists of the owners, their staff, and different layers of clientele. Each staff member will have specific information such as a Social Security Number, a birthdate, address, phone number (optional), college degree (optional), proof of citizenship, state ID, gender, name [which will consist of a first and last name.], as well as a payment type, a staff type, hours worked and a unique Staff ID and Password for Access to the database. Each Applicant/clientele will have information like a name [consisting of First and last names.], a birthdate, email, Proof of citizenship, a Social Security Number, a State ID, a title provider (may be self or property owner), liability Insurance provider, and gender. Each applicant will be broken down into someone who maintains finances of or owns specific property(s). someone who maintains the finances of a specific property(s) and will provide their W2, credit score, income, assets, whether they have declared bankruptcy, are currently involved in a lawsuit, and they will also have the option of providing their Job Title/details. If the applicant owns the property then they will provide their exit strategy, renovation stage of the project, the address [consisting of the city, state, street, and zip] the current value of the property, the expected future value, and the acquisition date of the property.

The Applicant will also add whether they possess experience or not. If the applicant has prior experience with flipping or refinancing property, they will provide the Experience ID, contractor license number, as well as have the option to provide any active projects and/or previous projects. The applicant will also submit a Loan request which will have the purchase price of the property if not owned, percent of loan for construction, loan type, time table for renovations, percent for purchase of property if not owned, construction budget, and a loan ID.

# Data Modelling

The database will allow users to manually input credit scores, addresses, jobs, phone number, a SSN, State ID, email, gender, and DOB(date of birth), as well as other personal information regarding credibility for a loan. The database will:

1. Allow user to manually update information regarding a loan or client.
2. View respective applicants’ information.
3. Allow applicants to upload proof of identity
4. Allow applicants to upload proof of prior work and experience if wanted
5. Allow user to generate a list of possible applicants, accepted applicants and denied applicants.
6. Allow users to set loan term time and keep records of such.
7. Provide data to create a user interface graph/chart of possible risk
8. Allow employee access to database for loan related information and viewing.

# Expected Queries

1. Find details on individuals credit score
2. Find details of individuals related job experience if not null
3. Generated list of employees and their hours
4. Generate list of accepted loan requests
5. Generate list of rejected applicants
6. Generate list of undecided loan applicants
7. Find details related to time remaining for loan terms
8. Find related details on possible risk for undecided applicants
9. Find details to conduct background checks necessary for loan
10. Generate list of all Previous projects
11. Generate list of all Profit margins
12. Find previous project term length
13. Find profit margin from a previous project
14. Generate list of all positive profit margins from all previous projects
15. Generate List of all Previous project term lengths



# Schedule

***A screenshot of a social media post

Description automatically generated***

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Key** | **Folder** | **Parent task** | **Title** | **Workflow** | **Status** | **Custom status** | **Priority** | **Assigned To** | **Start Date** | **Duration** | **Duration (Hours)** | **End Date** |
| 1 | / |  | [Presentation](https://www.wrike.com/open.htm?id=471977722) | Default Workflow | Active | New | Normal |  | 5/11/2020 | 1 day | 8:00 | ####### |
| 2 | / |  | [Transfer to Client](https://www.wrike.com/open.htm?id=471977691) | Default Workflow | Active | New | Normal |  | 5/4/2020 | 6 days | 48:00 | ####### |
| 3 | / |  | [Integrate Entire Project](https://www.wrike.com/open.htm?id=471977598) | Default Workflow | Active | New | Normal |  | 4/15/2020 | 14 days | 112:00 | 5/4/2020 |
| 4 | / | Integrate Entire Project | [Test](https://www.wrike.com/open.htm?id=471978411) | Default Workflow | Active | New | Normal |  |  |  |  |  |
| 5 | / | Integrate Entire Project | [Host](https://www.wrike.com/open.htm?id=471978414) | Default Workflow | Active | New | Normal |  |  |  |  |  |
| 6 | / |  | [Design Front End of Site](https://www.wrike.com/open.htm?id=471977563) | Default Workflow | Active | New | Normal | Clauria | Josh | 4/1/2020 | 11 days | 88:00 | ####### |
| 7 | / | Design Front End of Site | [Design Layout](https://www.wrike.com/open.htm?id=471978400) | Default Workflow | Active | New | Normal | Alex | Moshe | Max | |  |  |  |
| 8 | / | Design Front End of Site | [Home Page](https://www.wrike.com/open.htm?id=471978403) | Default Workflow | Active | New | Normal | Alex | Moshe | Max | |  |  |  |
| 9 | / | Design Front End of Site | [Form](https://www.wrike.com/open.htm?id=471978406) | Default Workflow | Active | New | Normal |  |  |  |  |  |
| 10 | / |  | [Implement Database](https://www.wrike.com/open.htm?id=471977541) | Default Workflow | Active | New | Normal |  | 3/23/2020 | 13 days | 104:00 | 4/8/2020 |
| 11 | / | Implement Database | [Relationships](https://www.wrike.com/open.htm?id=471978356) | Default Workflow | Active | New | Normal | Alex | Moshe | Max | |  |  |  |
| 12 | / | Implement Database | [Operations](https://www.wrike.com/open.htm?id=471978358) | Default Workflow | Active | New | Normal | Clauria | Josh |  |  |  |  |
| 13 | / | Implement Database | [Extractions](https://www.wrike.com/open.htm?id=471978361) | Default Workflow | Active | New | Normal | Alex | Moshe | Max | |  |  |  |
| 14 | / |  | [Break](https://www.wrike.com/open.htm?id=471977454) | Default Workflow | Complete | New | Normal |  | 3/16/2020 | 6 days | 48:00 | ####### |
| 15 | / |  | [Turn Project In](https://www.wrike.com/open.htm?id=471977349) | Default Workflow | Complete | New | Normal |  | 3/11/2020 | 1 day | 8:00 | ####### |
| 16 | / |  | [Revision Period](https://www.wrike.com/open.htm?id=471977324) | Default Workflow | Complete | New | Normal |  | 3/2/2020 | 8 days | 64:00 | ####### |
| 17 | / |  | [Project 1: Finish Project Requirements](https://www.wrike.com/open.htm?id=471977281) | Default Workflow | Complete | New | Normal |  | 2/19/2020 | 9 days | 72:00 | 3/2/2020 |
| 18 | / |  | [Project 1: Rough Drafting](https://www.wrike.com/open.htm?id=471977140) | Default Workflow | Complete | New | Normal |  | 2/3/2020 | 13 days | 104:00 | ####### |
| 19 | / | Project 1: Rough Drafting | [EERD and Schema](https://www.wrike.com/open.htm?id=471978121) | Default Workflow | Complete | New | Normal | Alex |  |  |  |  |
| 20 | / | Project 1: Rough Drafting | [Target Business and Business Process](https://www.wrike.com/open.htm?id=471978146) | Default Workflow | Complete | New | Normal | Max |  |  |  |  |
| 21 | / | Project 1: Rough Drafting | [User Requirements](https://www.wrike.com/open.htm?id=471978168) | Default Workflow | Complete | New | Normal | Josh |  |  |  |  |
| 22 | / | Project 1: Rough Drafting | [Table of Contents | Introduction | Meeting Log | Project Plan](https://www.wrike.com/open.htm?id=471978217) | Default Workflow | Complete | New | Normal | Moshe |  |  |  |  |
| 23 | / |  | [Project Orientation](https://www.wrike.com/open.htm?id=471976066) | Default Workflow | Complete | New | Normal |  | 1/27/2020 | 6 days | 48:00 | 2/3/2020 |
| 24 | / |  | [Meet Client](https://www.wrike.com/open.htm?id=471976064) | Default Workflow | Complete | New | Normal |  | 2/3/2020 | 1 day | 8:00 | 2/3/2020 |

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| Meeting Log | | | | |
| **Date** | **Time** | **Location** | **Attendance** | **Description** |
| **1/27/2020** | 3:30 | Classroom | Josh, Max, Alex, Moshe | Introduction, Team Orientation, Create WhatsApp Chat |
| **2/2/2020** | 12:30 - 2:30 | Library | Josh, Max, Alex, Moshe | Project Description, Meet with Client |
| **2/5/2020** | 1:30 - 3:00 | Library | Josh, Alex, Moshe, Clauria | Project Breakdown, Requirements |
| **2/11/2020** | 5:00 - 7:00 | 7800 York Road | Josh, Max, Alex, Moshe, Clauria | Project Distribution, ERD, Set up Repositories |
| **2/17/2020** | 5:00 - 6:00 | 7800 York Road | Josh, Max, Alex, Moshe | Begin Drafting Rough Copies, Set Up Google Doc |
| **2/19/2020** | 5:00 - 7:00 | 7800 York Road | Josh, Max, Alex, Moshe | Client Meeting, Review Drafts |
| **2/26/2020** | 4:45 - 5:00 | 7800 York Road | Josh, Max, Alex, Moshe | Follow Ups |
| **3/2/2020** | 5:00 - 7:00 | 7800 York Road | Josh, Max, Alex, Moshe, Clauria | Completed Project 1 |
| **3/4/2020** | 5:00 - 7:00 | 7800 York Road | Josh, Max, Alex, Moshe, Clauria | Client Review and Signature |
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