Developing a Data System to Address Foreclosures in Massachusetts

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WAFT
WORCESTER ANTI-FORECLOSURE TEAM

Massachusetts Alliance Against Predatory Lending
Your Partners in Fighting for Housing Justice

WORCESTER POLYTECHNIC INSTITUTE 1865
WPI

MAAPL and WAFT

- Massachusetts Alliance Against Predatory Lending (MAAPL)
- Worcester Anti-Foreclosure Team (WAFT)
- Educate homeowners on how to fight their foreclosure status
- Door knocking, brochures, and community meetings, court and policy action
- By collecting data from public sources, we can help MAAPL analyze predatory lending practices

Foreclosure in Massachusetts

Foreclosure: defaulting on mortgage payment leads to loss of home ownership

Causes of foreclosure:

- catastrophic events (divorce, death, job loss)

- global events (COVID-19 and 2008 recession/housing crisis)

- unethical and/or illegal lending practices

The Foreclosure Process

1. Defaulted or missed payment for more than 3 months
2. Notice of foreclosure to homeowner, lender files petition
3. Foreclosure recorded in Registry of Deeds; affidavit recorded
4. Newspaper notices of auction (Massachusetts is auction state)
5. Auction or foreclosure by entry (unopposed entry by lender with witness)

MAAPL's Analysis Goals

Investigate illegalities and inconsistencies in the foreclosure process

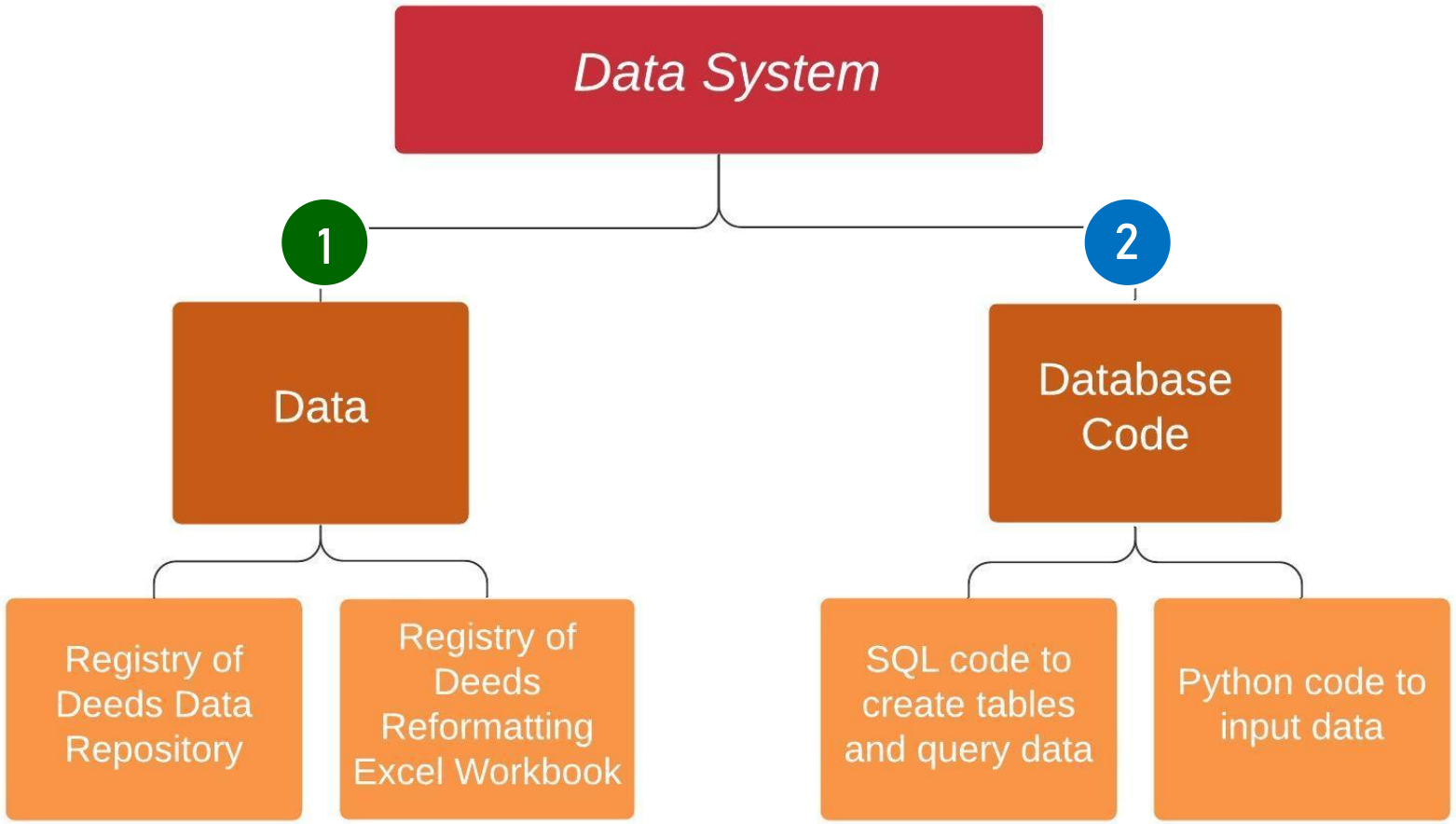
Investigate whether mortgage companies intentionally provided mortgages that exceeded home values.

Investigate the legality of pooling mortgages.

Project Goals and Objectives

- Goal: Develop a data system to help MAAPL and WAFT collect and analyse data related to foreclosures in Massachusetts
- Objectives:

Project Outcomes



1 Data Sources and Data Needs

Sources	Data Available	Data Collection Method
Massachusetts Registries of Deeds	•Foreclosure documentation •Property history •Indexed data and scanned documents	•Indexed data from individual registries •Optical Character Recognition
US Securities & Exchange Commission	Foundational documentation for bundled mortgages and securitized trusts	•OCR •Text scraping script
Massachusetts Public Notices	•Newspaper ads for foreclosure auctions •Foreclosure details	•Text/web scraping script
CoreLogic/MLS real estate database	•Property sales, foreclosure, and tax assessment history •Property details •Owner demographics	•Text/web scraping script •Some data may come in spreadsheets, but unknown

1 Indexed Publicly Available Data

- Emailed Registry of Deeds for each county in Massachusetts asking for indexed data on foreclosures
- Received indexed data from 7 counties
- Reformatted and organized indexed data for easy uploading into database, created Excel workbook to streamline this process
- Determined which additional data must be collected through web-scraping or OCR

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Document Number	Grantor	Grantee	Type	Town	Blank	Book	Page	Recorded Date	Reco
220	TITAN CAPITAL INC	TITAN CAPITAL INC	FORECLOSURE DE	EDGARTOWN		1339	513	1/13/2014	
220	LLMJ INVESTORS LLC	TITAN CAPITAL INC	FORECLOSURE DE	EDGARTOWN		1339	513	1/13/2014	
276	MARTHAS VINEYARD SAVINGS BANK	JACOBS HERBERT	FORECLOSURE DE	EDGARTOWN		1339	850	1/15/2014	
276	DUKES COUNTY SAVINGS BANK	JACOBS HERBERT	FORECLOSURE DE	EDGARTOWN		1339	850	1/15/2014	
276	STARBUCKS RIDGE REALTY TRUST	JACOBS HERBERT	FORECLOSURE DE	EDGARTOWN		1339	850	1/15/2014	
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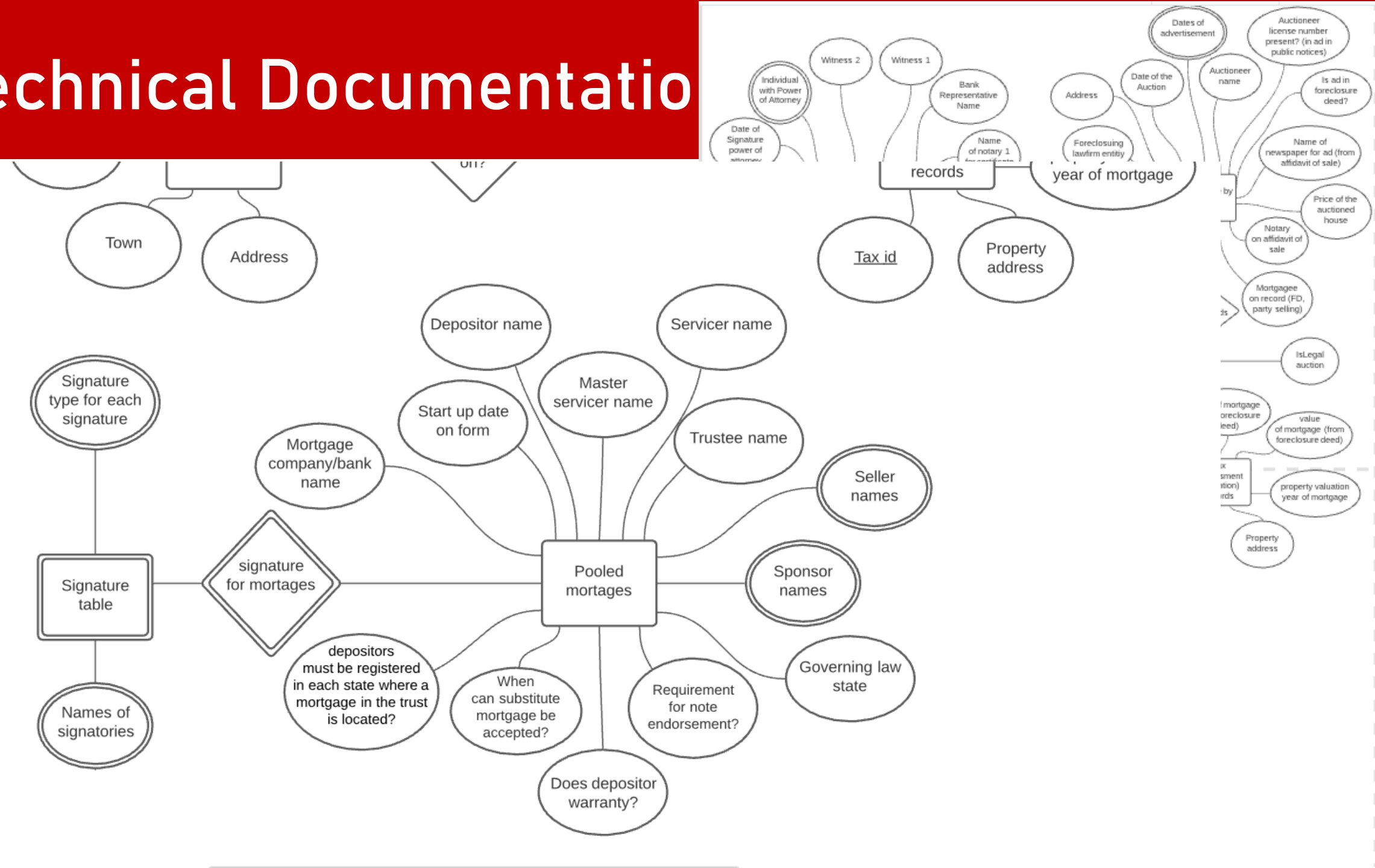
452	BANK OF AMERICA NA	SAUCIER LANA S	FORECLOSURE DE	OAK BLUFFS		1340	471	1/24/2014	
452	SHELLEY DENNIS L	SAUCIER LANA S	FORECLOSURE DE	OAK BLUFFS		1340	471	1/24/2014	
452	SHELLEY CATHERINE	SAUCIER LANA S	FORECLOSURE DE	OAK BLUFFS		1340	471	1/24/2014	
1059	NATIONSTAR MORTGAGE LLC	NATIONSTAR MORTGAGE LLC	FORECLOSURE DE	OAK BLUFFS		1342	603	2/25/2014	
1059	REITZAS MORGAN	NATIONSTAR MORTGAGE LLC	FORECLOSURE DE	OAK BLUFFS		1342	603	2/25/2014	

2 Technical Documentatio

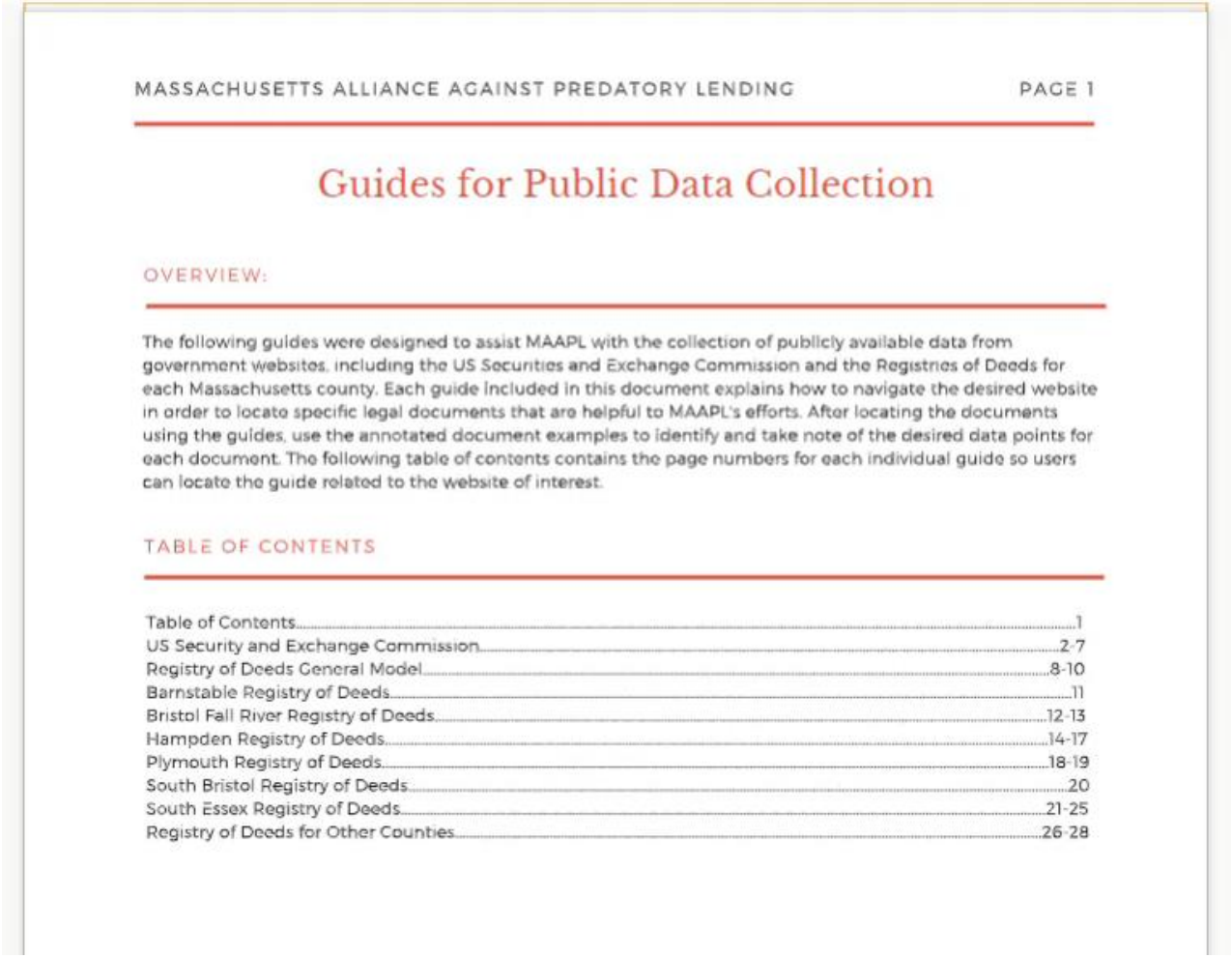


2 Database Code

```
CREATE TABLE Foreclosure (
    ForeclosureID VARCHAR(7),
    EntryID VARCHAR(7),
    IsEntryLegal VARCHAR(5),
    AuctionID VARCHAR(7),
    AuctionLegal VARCHAR(5),
    HomeownerID VARCHAR(7),
    TaxID VARCHAR(7),
    PRIMARY KEY (ForeclosureID),
    UNIQUE (EntryID),
    UNIQUE (AuctionID),
    UNIQUE (HomeownerID),
    UNIQUE (TaxID)
);
```

Volunteer Guides

Documentation for volunteers manually collecting important data



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Guides for Public Data Collection

OVERVIEW:

The following guides were designed to assist MAAPL with the collection of publicly available data from government websites, including the US Securities and Exchange Commission and the Registries of Deeds for each Massachusetts county. Each guide included in this document explains how to navigate the desired website in order to locate specific legal documents that are helpful to MAAPL's efforts. After locating the documents using the guides, use the annotated document examples to identify and take note of the desired data points for each document. The following table of contents contains the page numbers for each individual guide so users can locate the guide related to the website of interest.

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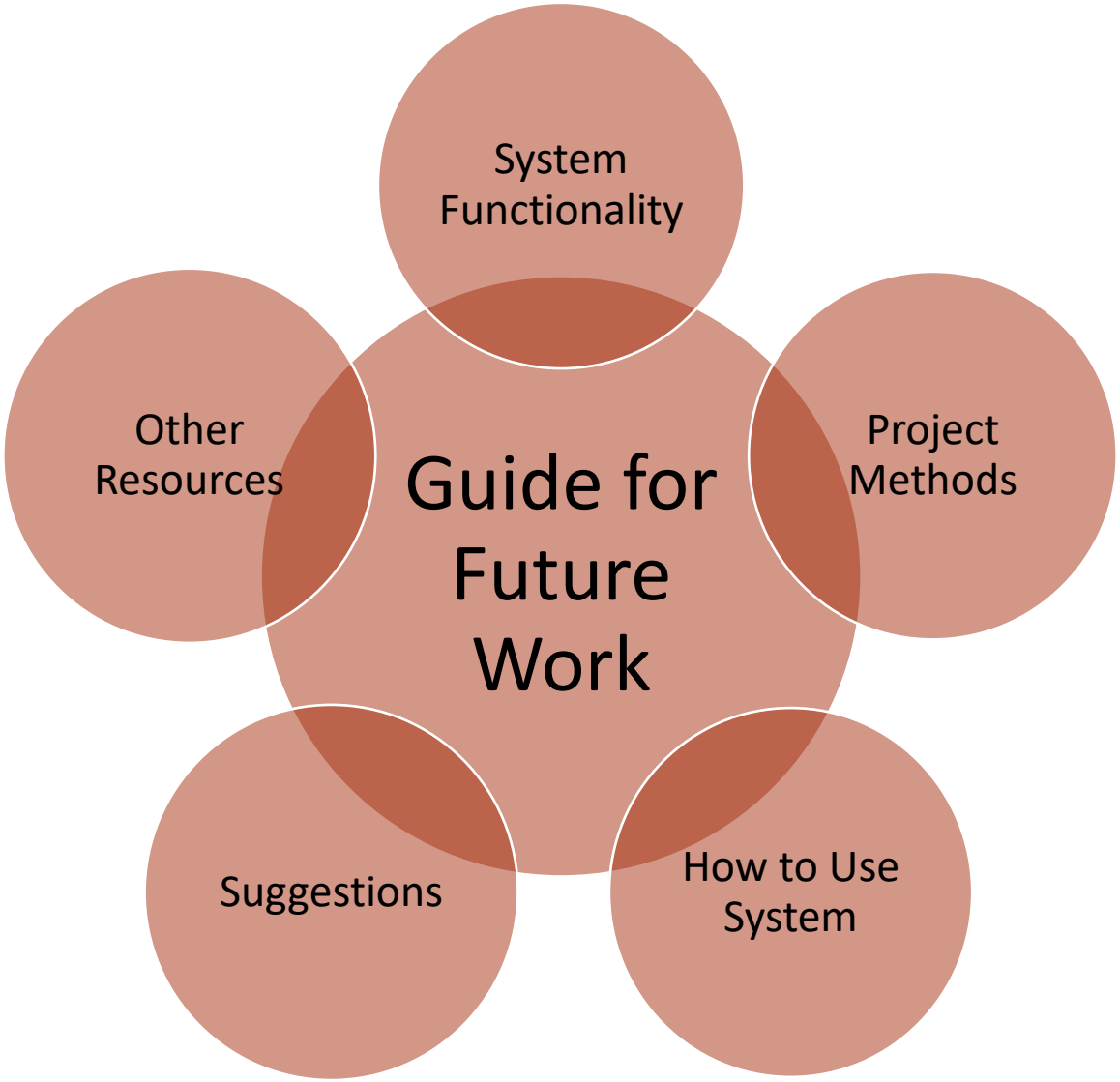
Future Development Guide



Recommendations for Future Work

Analyze and visualize	the collected data
Refine	the data intake form
Expand	the data system
Automate	the process of acquiring information form the Registry of Deeds
Create	case management and contact management systems

Potential Project Impacts

Improved MAAPL's ability to advocate for new policy and homeowners

Helped establish a long-term partnership between MAAPL and WPI

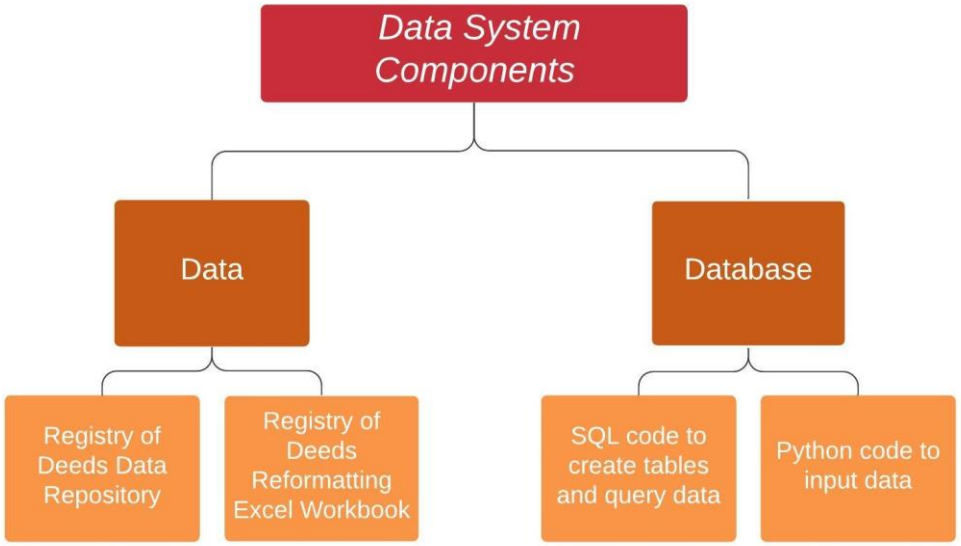
Acknowledgements

We would like to extend our sincere gratitude to the following people who were instrumental in this project:

- Our sponsor and MAAPL/WAFT Founder, Grace Ross
- Our advisors, Dr. Gbetonmasse Somasse and Dr. Scott Jiusto
- Steve Floridia, MAAPL IT expert
- The many helpful individuals at Registries of Deeds throughout Massachusetts
- Our fellow CTPC classmates

Thank you for listening!

Questions and Discussion



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