

The Un-Division Network

Jacob Darabaris – Computer Science

Sponsored and Advised by Dr. Deborah Hwang



BACKGROUND

A subdivision is a grouping of homes developed via a similar blueprint on a grid structure, and there is enormous potential for an application to properly address the needs of the parties involved, notably realtors, prospective homebuyers, and Home Owners Association (HOA) members.

Among these 3 groups, HOA Members are the most underserved. They have no graphical means of viewing and organizing their subdivision and its data.

ABSTRACT

My 'Un-Division Network' is a web application that provides a meaningful way to view and organize the subdivision in ways that will allow for increased home sales, improvement, and transparency within the subdivision. Including features such as:

Subdivision Map Builder, Database, and User Profiles

The key feature is the Subdivision Builder which is unprecedented in design and function. This feature acts as an API, where developers can utilize the data obtained to power the rest of their platform.

DESIGN

The Subdivision Builder is largely comprised of 3 main parts:

1. The Subdivision
2. The Home
3. The Owner

Entity Relationship Diagram



RESULTS

BUILDER VIEW

STANDARD VIEW

The Builder View shows a map with house icons and a sidebar with categories: Housing (Home, Townhome), Structures, Roads, Nature, and Misc. Below the map are input fields for Status*, Address*, For Sale?*, Information, Current Owner, and Estimated Value, along with a red 'X' and a green checkmark.

The Standard View shows a 'BUILD' button, a map with house icons, and a data table for a specific home:

CONSTRUCTION	250 Poplar Lane
FOR SALE	N/A
N/A	\$120,000

An 'EDIT' button is located below the table.

There are 2 views for the Subdivision Builder:

1. Standard View: for informational edits
2. Builder View: for map edits and additions

There are 6 key fields, 3 required, that are populated in a database for each home that is added. Other structures such as roads have many less fields.

CONCLUSION

The Subdivision Builder component of the Un-Division Network has the potential to revolutionize how neighborhoods interact and grow. It offers an easy way to design and save subdivisions via a simple web browser and attach important information to it. By laying the groundwork once, users can take the worry out of record-keeping and planning.