

Capstone Project Final Proposal

Austin Dollar

CSCI 490

Professor Sam Siewart

Summary and Value proposition

This project was inspired by a Facebook group I am a member of. Somebody made a post about how difficult it can be to get in touch with landowners to get permission to hunt their property. The comments included people asking for an app with that functionality. This got me thinking about my Capstone, but I thought that it could even scale past strictly hunters, and allow all types of landowners and visitors to said land, for things like dispersed camping, hiking, fishing, and even as professor Siewart pointed out in discussion, getting permission to fly drones over the land. In essence, the app will be similar to AirBnb, but rather than focusing on houses and apartments, it will focus strictly on land itself. There will be two user types, land owners and land users, and they will have their respective roles. Land owners will be able to provide access to land for a set fee that they determine. The app will allow for posting of land with the price they set, and it will keep them up to date about how much money they are making, as well as when and who the visitors are. Visitors, likewise, can search for a specific property that they want access to and filter by location, cost, etc. This app will provide a great service to outdoorsmen of all types and will provide a sort of passive income for land owners.

Design concept, Block Diagram, Mock up Prototype

In essence, my design flow will consist of a login/register page on startup. Here you can login and create an account. If you create an account, the account creation process allows you to select landowner or visitor (landowners who want to be a visitor need to create a separate visitor account). Once logged in, the owners and visitors each have their own view. They both land on a profile splash page, which has their information, as well as a list of any upcoming visits/visitors and contact information for people currently staying. The owner view also has a "total money earned." Both views also have a calendar, which, for the owner shows any upcoming visitors, and for the visitor, they can see current planned trips (and maybe look for more via calendar

availability?). Strictly on the owner's view is a notification section, which tells the owner when a visitor has booked a trip. Strictly on the visitor's side, is a search function, which allows the user to search for a property and filter by things like location (distance), price, availability, etc. A link to the adobe XD prototype is below, followed by a basic block diagram of what the design flow will look like:

Link to Prototype (Adobe XD file also included in submission):

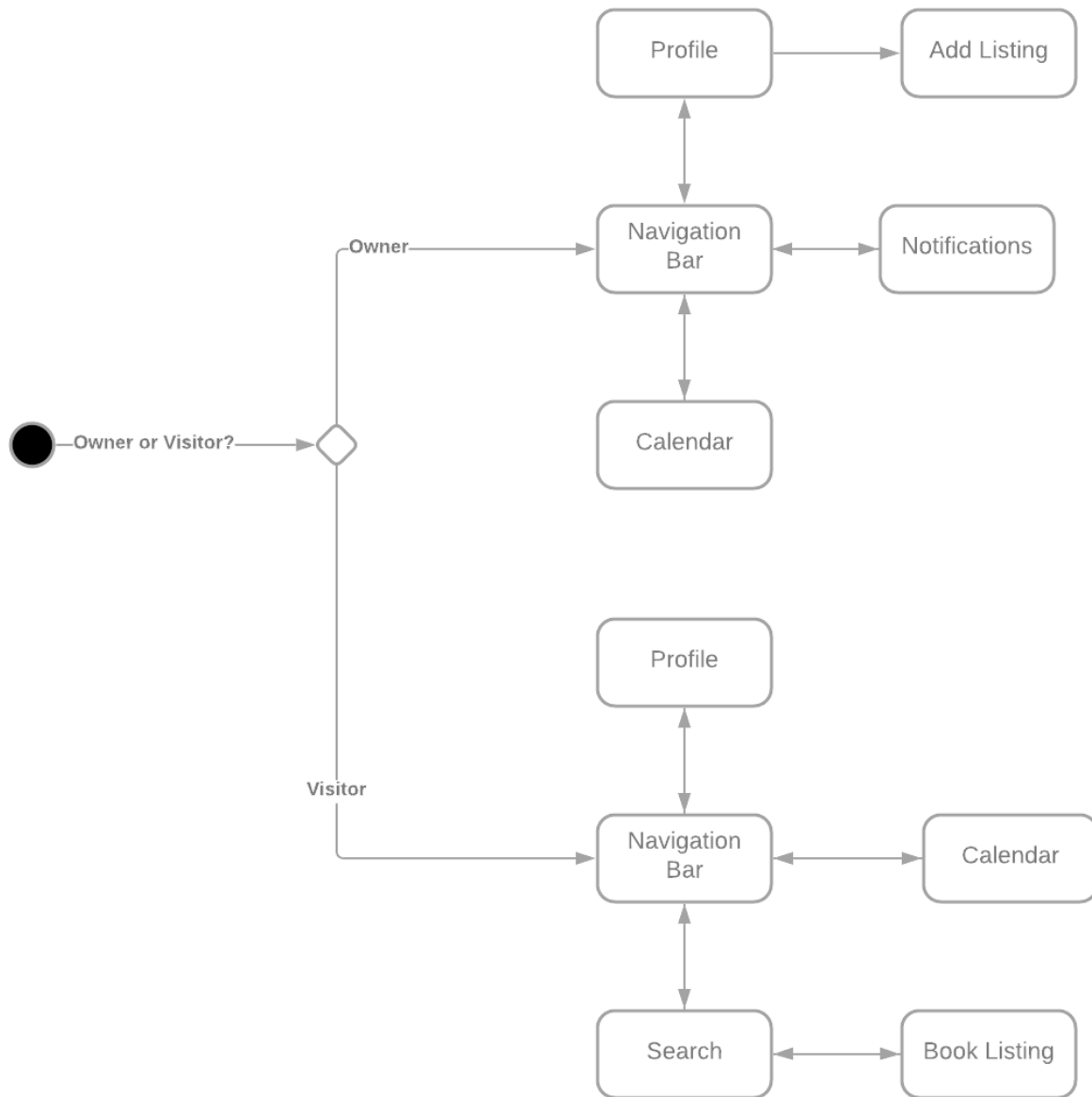
<https://xd.adobe.com/view/152a6d79-b942-4eeb-acb3-e9965eb0f08e-4079/>

(Link now has an updated page view of what property listing screen would look like)

Block Diagram:



Activity Diagram:



Goals and objectives (Draft Requirements)

My major goals and objectives for this project (aka Draft Requirements) are as follows:

- Account creation with two account types (landowner/visitor)
 - Land owner ability to post land for usage
 - Visitor ability to book that land
 - Calendar view for both users as described above
 - Visitor ability to search and/or filter results of available properties
 - Add in payment processing for land access (ability to pay/charge)
 - Notification system for landowner when a visitor books a visit
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- Stretch goal: in app communication between owner/client
 - Stretch Goal; Mapping (Public land is fine, but difficult to digitally map private property for display)