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CS 360: User Components and Data

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When going through multiple devices that contain apps that I use daily, weekly, or only a few times a year, I decided to review the OnX Hunt GPS mapping application. OnX maps are used by hunters, anglers, hikers, or any other individual who needs a GPS mapping system to navigate scenic areas. The particular version I will be analyzing is the OnX Hunt app. This version of the app is geared toward hunters and anglers. OnX Hunt provides a GPS on one's mobile device (phone, tablet, compatible portable GPS, or computer) to give the user a real-time mapping and coordinate system to use either in the field or from home.

When accessing the app, the initial screen that generates is a real-time, layered GPS map of the user's location. This data is gathered from the user's device accessing the app. Depending on the user's subscription type (premium for a single state's mapping or elite for all 50 state maps), the user can navigate the map to the desired location. On the map screen, there are multiple UI components available to the user. There is a Hamburger menu that opens a list of navigation links such as "My Account," "Upgrade," "Map Setting," and "Inbox ."These links take you to the OnX web page to sign in to your account and edit membership and account details.

One can also use a double-tap method with their finger to mark a waypoint. A waypoint is a clickable icon that, when pressed, will generate a pop-up comment window with details about the waypoint the user has entered. One can also see property boundary markers, which the user can press a particular piece of land, which will generate a pop-up comment box with details about the specific property, such as landowner name and address, hunting regulations, current weather, acreage, and GPS coordinates. Another component is an icon for a search field. When the user clicks this icon, a search field generates, acting as an input field, allowing the user to search for a location or landowner. The user chooses this search filter via a radio button to select a location or landowner for their search filter.

There is a set of icons on the bottom of the home screen that navigates to other sections of the app, such as map layers (select from a radio button a list of map layers to use), offline maps (downloaded maps the user can use in offline mode or where a signal is weak), my content (navigates to a list of waypoints the user has created), and tracking (marks user's movement via a line drawn on the map to allow the user to see their trail). Each icon generates its respective menu for the user to interact with and contains multiple components such as buttons, toggles, forms, or folders.

The data used in the app range from personal account information, landowner information, hunting regulations, land information, and GIS data. Each data set is collected and used in its variable to allow the user to complete a task or achieve their desired result. According to OnX (2022), real-time mapping data via GPS is gathered from GIS data obtained from the Department of Defense Standard positioning service. This GPS is free to all users for standard / basic service (Bertagna, 2010). This gives a basic world map, but OnX breaks it down by the state for the user. Topographic layers are acquired from the USGS's National Geospatial Program, which is the program and agency responsible for the topographic mapping of the United States (USGS, 2022). The map data will be acquired from other sources depending on the user's country of use.

Account information is data acquired by the app via the user. Users who create an account will input data such as name, username, password, and payment information. Data is also obtained to create the land parcel information as well. According to OnX (2022), a team known as the GSIS is responsible for working with the credible city, county, state, and federal agencies. All landowner information is obtained from the agencies via public record documents, accessible to all legal citizens. This data is then collected and added to the application for the user to access.

The data of landowner information and parcel data is useful to users in terms of complying with state and federal hunting and angling regulations. For example, as a user of the application, it has been beneficial when trying to track an animal I harvested. The animal crossed from the property I had permission to be on to a property I did not. Using the application, I could locate my current location via the GPS data, pull up the adjoining property info via the public record data, and use the data to locate the landowner's address and go there to ask permission to retrieve the animal. This scenario was a successful experience regarding what the app provides and can help the user. Permission was granted to their property; the animal was ethically retrieved, and no state or federal hunting regulations or laws were broken.

One other goal the user can accomplish via the OnX Hunt app is the property boundaries and access to state and federal public lands that are legally open to all tax-paying US Citizens. This may sound similar to the scenario presented above, but it becomes more complex regarding public lands. In an Interview with OnX founder Eric Siegfried, Journalist and Meateater podcast /Television host Steve Rinella discussed the issue of checkerboards and corner crossing about public lands. According to Siegfried (Rinella, 2018), checkerboarding is the issue of private lands preventing access to isolated pieces of public lands due to no easements or public road and trail access. OnX maps were founded on this issue and provide users with accurate and up-to-date maps to show access points to lands and private property data. To bring this issue to public light, gain access via foundations and funds such as the Land and Water Access fund.

Corner crossing goes hand in hand with checkerboarding. Corner crossing is the travel of an individual from one piece of public land to another piece of public land. The individual will cross from each parcel by crossing at the corner points but violates trespass laws by encroaching on the adjoining private property’s air space at the meeting corners. This law has led to many states abolishing it via court rulings on behalf of the corner crossers. In these cases, one tool used to show a clear representation of the areas in question is the OnX map app. For example, in a case in 2021 (Jr, 2022), four hunters from Missouri were charged with criminal trespass due to a corner crossing in Wyoming. During the criminal trial, the defendants used OnX maps to clearly show the area where the alleged trespass happened. With this tool, the defendants were found not guilty in criminal court and have used their clear evidence in civil court to take it to the federal court to advocate for changes to laws. This use is the ultimate example of the benefits of OnX and the app used by hunters and anglers.

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