

# **Guide to the Galaxy App Studies, Suggestions and UX ideas**

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# Intro

The Android Application being developed recreates the spatial relationship of the Solar System within the scale of the Adler Planetarium and Northly Island park.

It provides in-depth and educational information while adding a healthy and fun element, of hiking through the Solar System.



# Steps Taken As Part of Study

- **Brainstorming**
- **Coding**
- **Interviewing**
- **Usability Testing**
- **Mockup**



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# Results from UX Interviews: Incentives

- **Physical interactions**
  - QR codes
  - physical stamps and passports
- **Information fit the real world**
- **Final incentive for reaching all the orbits and planets**

# Results from UX Interviews: Modes

- **Different Levels:**
  - Easy - basic information
  - Medium - more in depth, but still not super scientific
  - Hard - Very deep info, that even researchers would find interesting
- **Different Interaction Modes:**
  - Discovery Mode - you just cross the orbits, no definite destination
  - Geocache Mode - The planets are in set locations, you have to get to the specifically
  - Story/Trivia Mode - A longer route, based upon a storyline or answering quiz questions, leading you from planet to planet, at specific locations

## Results from UX Interviews: Technical Issues

- The GPS/Location does not update as consistently as desired.
- The screen has issues within sunlight due to shading.
- Different Android Devices would require optimization due to size.

These may be fixable through

- optimizing the GPS location
- fixing brightness/shading based on light levels
- and making sure objects size in relation to the screen size.

# **Mode Selection Screen**



# Android Guide to the Solar System

Easy

Discovery

Medium

Geocache

Hard

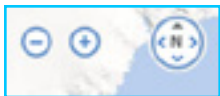
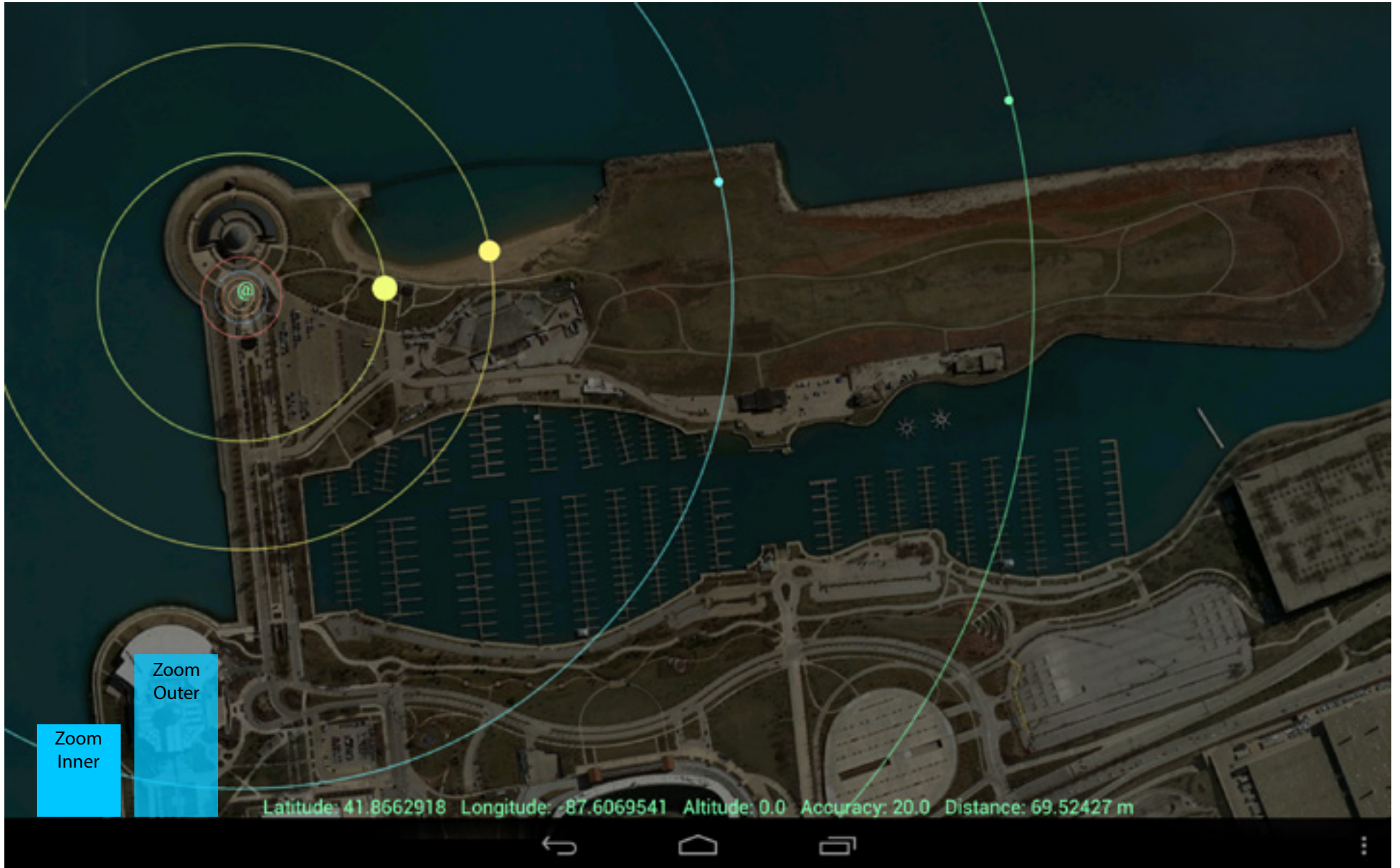
Story

Latitude: 41.8662918 Longitude: -87.6069541 Altitude: 0.0 Accuracy: 20.0 Distance: 69.52427 m

Being able to easily select what form of mode the application is in is key. We considered having drop down menus from one screen, that let the user select forms (akin to an application like word or powerpoint) but decided that more of a game style would be preferable. Here, the user starts at a 'HOME' screen, and then moves into a mode of the app. If they want to change modes, they have to go 'HOME' again.

# **Ability to Zoom the Map**

## ZOOM MODES, CONTROLLABLE BY USER



Bing Maps  
Zoom Buttons



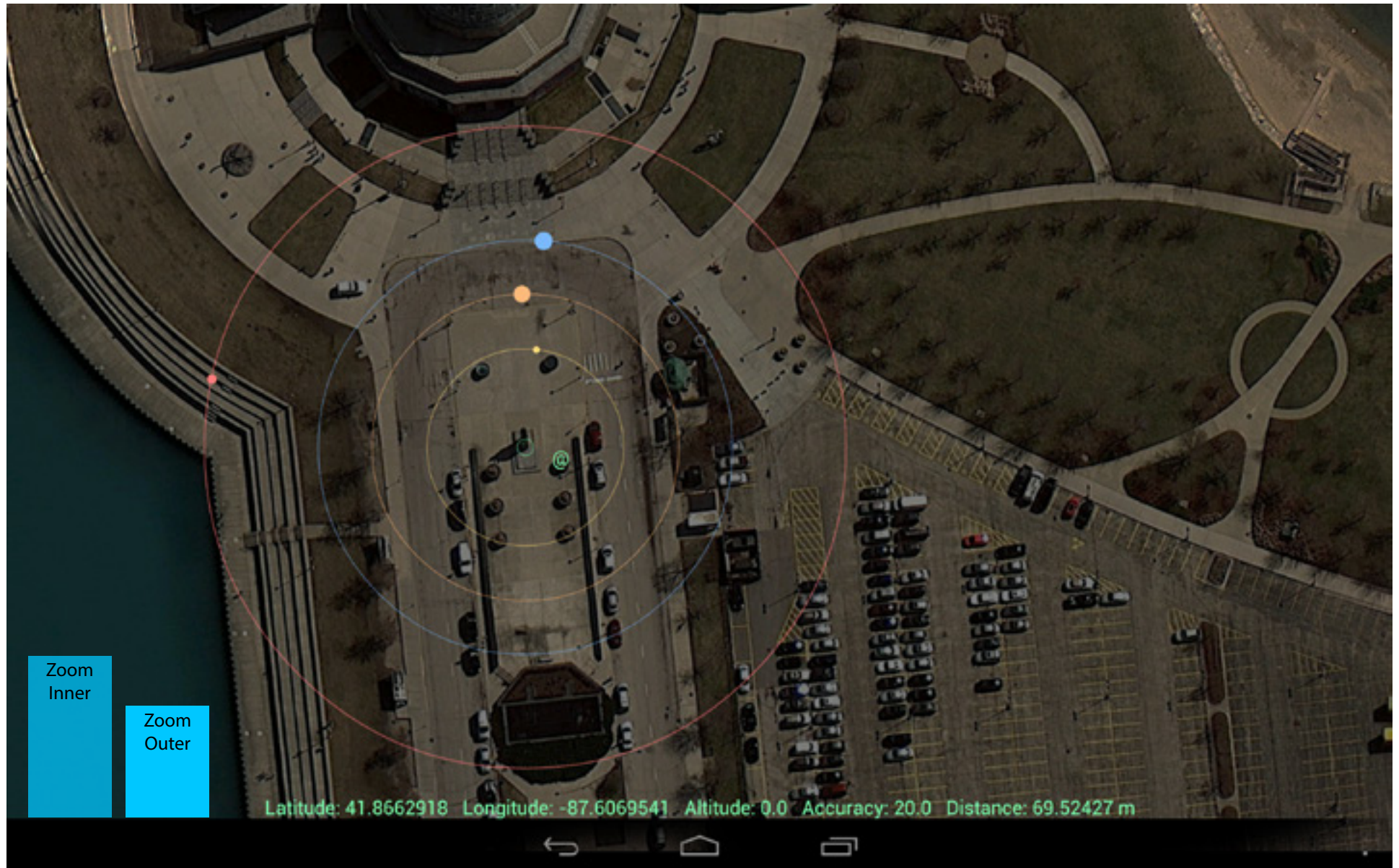
Google Maps  
Zoom Buttons

Using Fingers to pinch in and out (would require more work to make sure things size correctly.)

Finger Pinch may be the best and most intuitive...but could be harder to program.



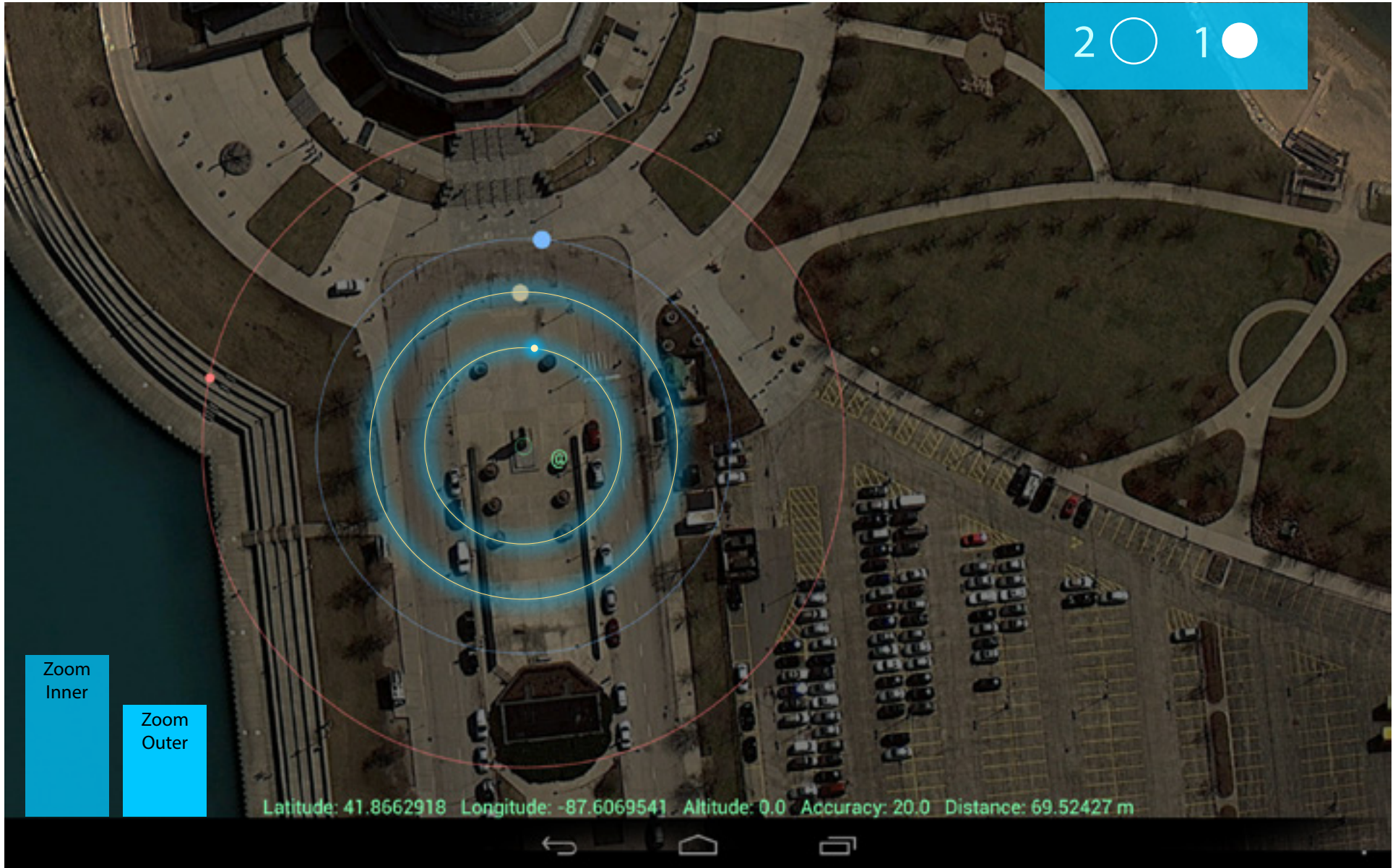
## ZOOM MODES, CONTROLLABLE BY USER



Zoom is kept to two modes, with a transition in between, it can support the feeling that this app is educational. Labeling the Zoom things like 'Inner' and 'Outer' can reiterate that the sizes relate to the inner and outer solar system.

# **Counters to Keep Track of How Many Orbits (and Planets) The User Visits**





Visualizing the planets encountered

Counters on the screen

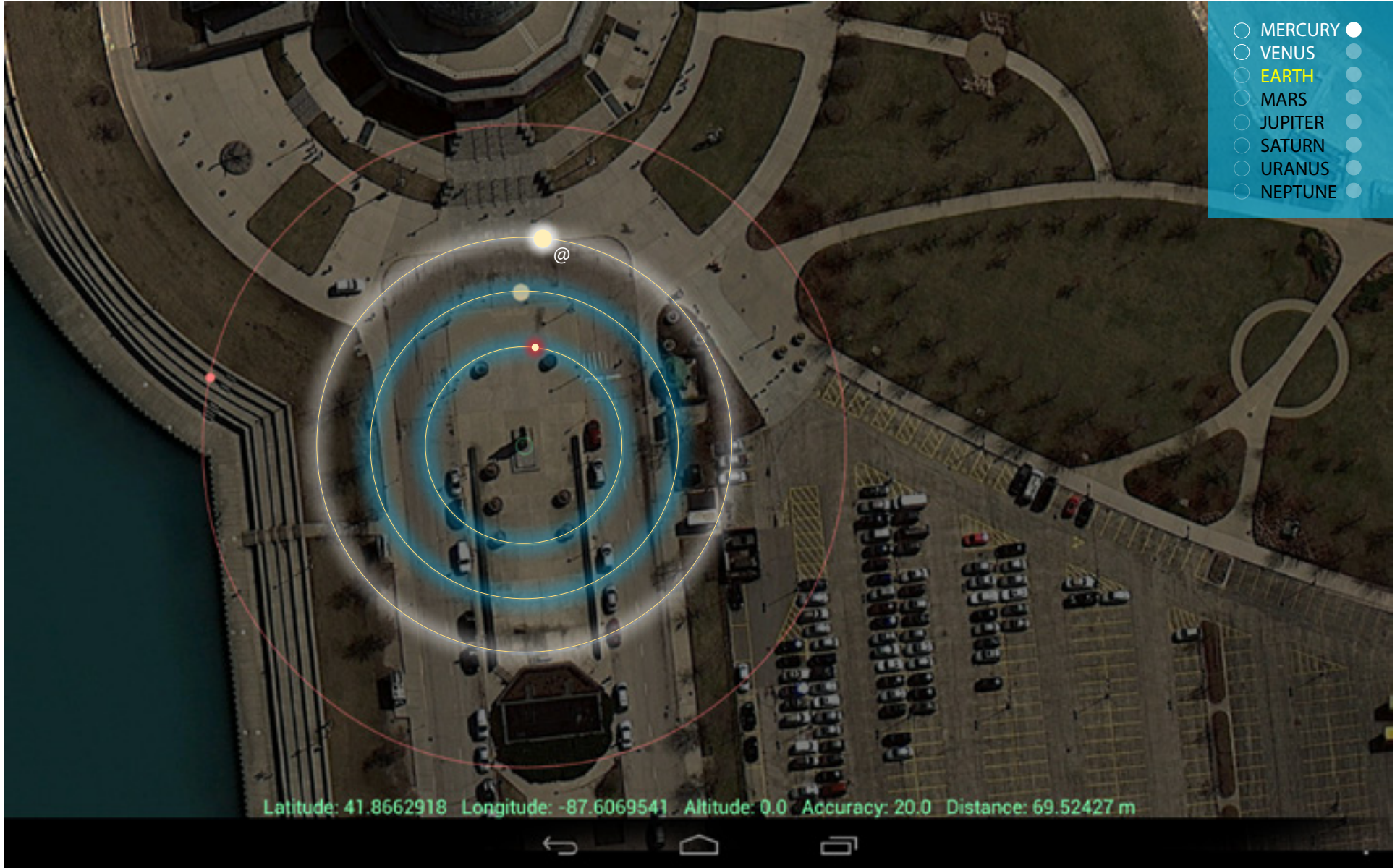
Cues to let the user know when getting near the next planet and orbit





This concept is based on the existing displays for the planets in the Museum. It could be interesting to draw a visual connection between the displays used in both the physical displays and the android application.





Concrete list of the planets  
Colors change to indicate the track



# **Display of Information**

○ MERCURY ●  
○ VENUS ●  
○ EARTH ●  
○ MARS ●  
○ JUPITER ●  
○ SATURN ●  
○ URANUS ●  
○ NEPTUNE ●

Zoom Inner

Zoom Outer

Latitude: 41.8662918 Longitude: -87.6069541 Altitude: 0.0 Accuracy: 20.0 Distance: 69.52427 m

**Earth** X

Earth is the third planet from the Sun, and the densest and fifth-largest of the eight planets in the Solar System.

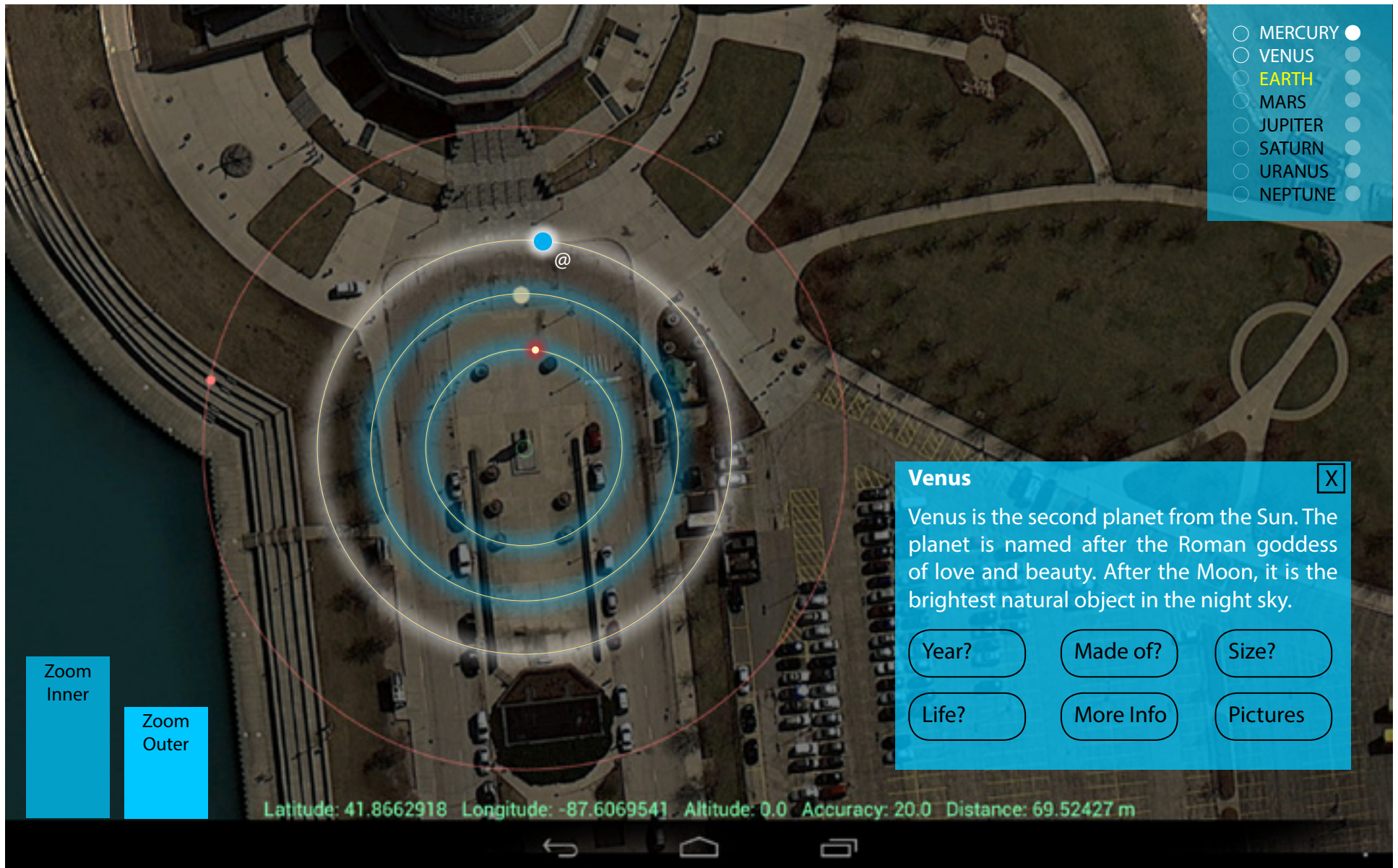
More Info

Click/Touch an image to get a related video or image

Pop-up information about the planet  
Click to see detail







Buttons for more detailed information about the planet