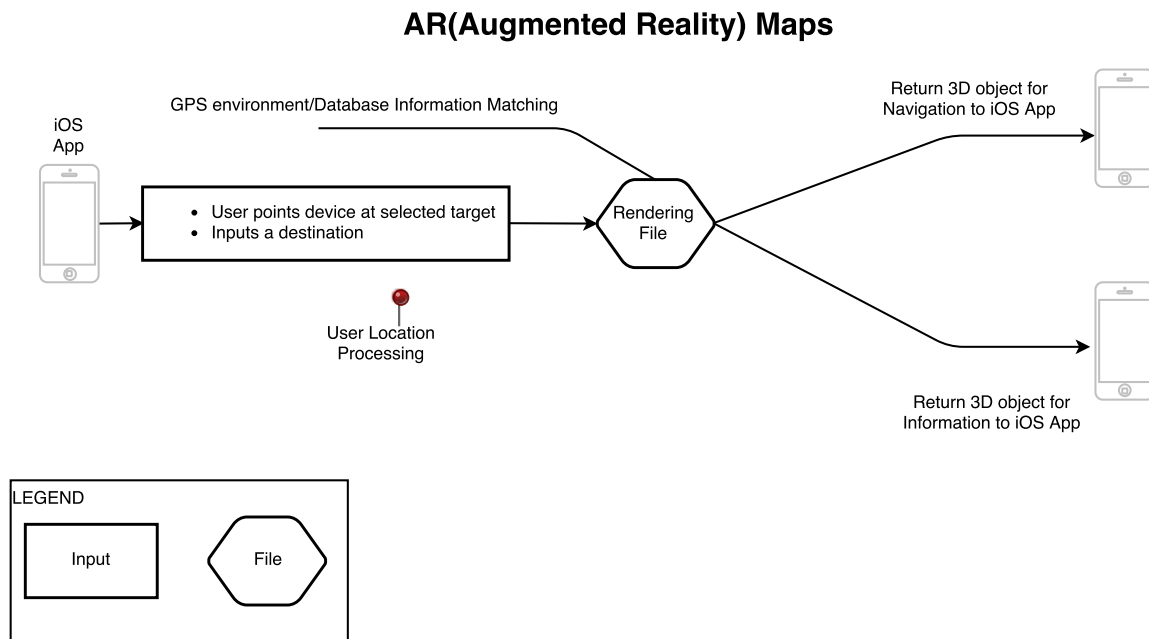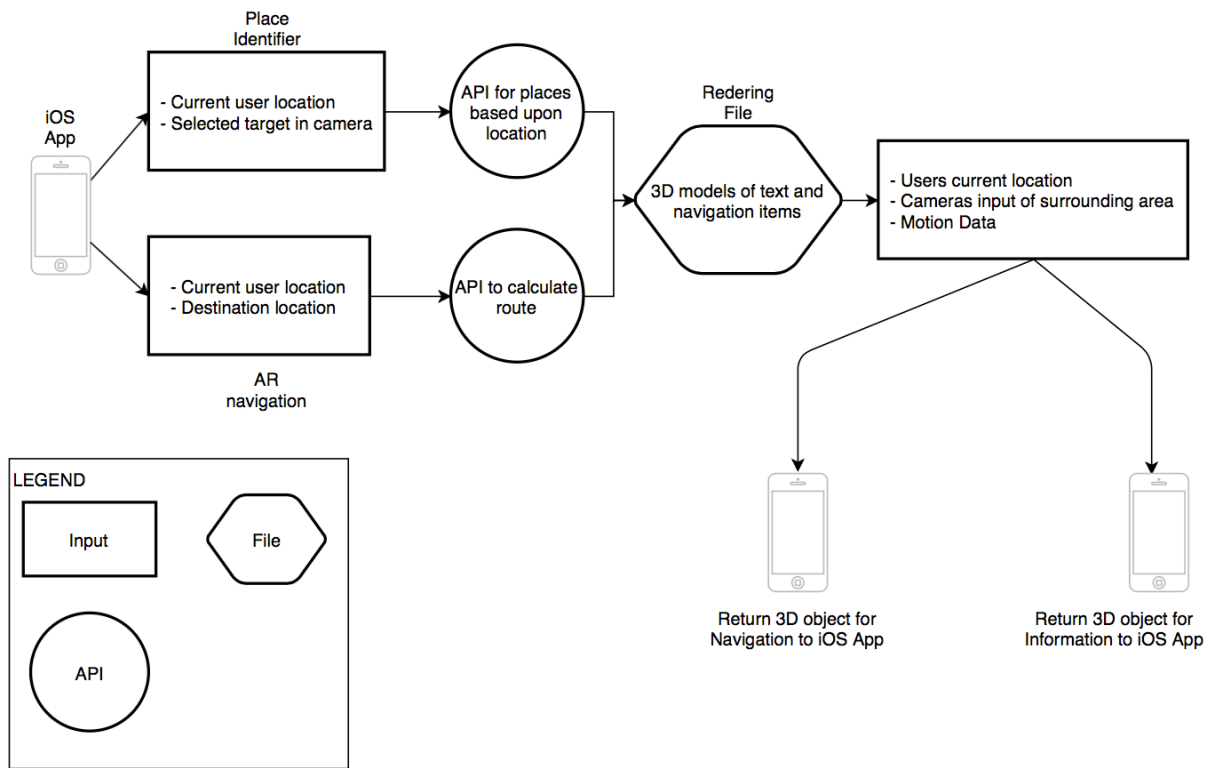# Design Diagrams:

Goal Statement - To navigate user from current location to their desired location using augmented reality to show the route over top of the real world using the iPhone's camera.

Design D0 -

AR(Augmented Reality) Maps

Design D1 –

Place
Identifier

iOS
App

- Current user location
- Selected target in camera

API for places
based upon
location

Redering
File

3D models of text and
navigation items

- Users current location
- Cameras input of surrounding area
- Motion Data

- Current user location
- Destination location

API to calculate
route

AR
navigation

LEGEND

Input

File

API

Return 3D object for
Navigation to iOS App

Return 3D object for
Information to iOS App

Design D2 –

Place Identifier

iOS App

- Current user location
- Selected target in camera

API for places based upon location

Rendering File

Place identifier → 3D text models

Navigation → 3D nav assets

- Current user location
- Destination location

API to calculate route

AR navigation

LEGEND

Input

File

API

Subsystem

- Users current location
- Cameras input of surrounding area
- Motion Data

Merge 3D navigation assets with location data, motion data, and camera data to show augmented reality route to desired location

Return augmented reality view to iPhone screen for navigation purposes

Matching target in camera with street view of GPS location system

Collect address for SERP

Running search engine results page (SERP) and pick first result related with the query

Return 3D object for Information to iOS App