

PROJECT OVERVIEW

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NEIGHBOR NINJA

LAST SUMMER, I PITCHED AN IDEA FOR AN APP TO A TEAM AT YANTRA INC., WHO THEN PROCEEDED TO SERVE AS A RESOURCE FOR ME AS I PLANNED, DESIGNED, AND CREATED MY CRIME AWARENESS MOBILE APPLICATION, NEIGHBOR NINJA. THE APP ALLOWS USERS TO COMMUNICATE WITH EACH OTHER ABOUT CRIMES HAPPENING IN REAL TIME AND PROMOTES SAFETY ON COLLEGE CAMPUSES. MY TEAM AND I PLAN TO LAUNCH A BETA ON UNIVERSITY CAMPUSES IN SUMMER 2017.



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MEETING 1

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NEIGHBOR NINJA

- ▶ CRIME WATCH SUBSTITUTE
- ▶ USER LOGS IN TO ACCOUNT ON WEB OR MOBILE DEVICE
- ▶ USER REPORTS CRIME OR SUSPICIOUS ACTIVITY
- ▶ NEIGHBORS (WITHIN SET RADIUS) ARE NOTIFIED VIA PUSH NOTIFICATIONS



- ▶ DATA CAN BE USED AND SAVED AS STATISTICS TO CATEGORIZE NEIGHBORHOODS BASED ON CRIME
- ▶ STATS WILL BE DISPLAYED TO USERS (SHOWING CRIME RATES, ETC)
- ▶ QUICK AND SIMPLE PROCESS TO SECURE NEIGHBORHOOD



- ▶ **HOME PAGE WITH DETAILS**
- ▶ **SIMPLE USER LOG IN SYSTEM**



- ▶ **CREATE USER PANEL WITH SUBMISSION AREA, STATS, AND NOTIFICATIONS**
- ▶ **CREATE MOBILE APP WHICH ALLOWS FOR PUSH NOTIFICATIONS**
- ▶ **CREATE WORKING SYSTEM WHERE USERS CAN SUBMIT QUERIES AND NEIGHBORS WILL BE ALERTED**



- ▶ SET RADIUS AROUND EACH USER TO DEFINE “NEIGHBORS”
- ▶ WHEN QUERY IS SUBMITTED, NOTIFICATION WILL BE DELIVERED TO DEFINED “NEIGHBORS” GROUP



- ▶ TARGET AUDIENCE IS ADULTS LIVING IN SUBURBS
- ▶ LIVE, DOCUMENTED PRODUCT
- ▶ MARKETED
- ▶ 200 ACTIVE USERS



MEETING 2

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NEIGHBOR NINJA

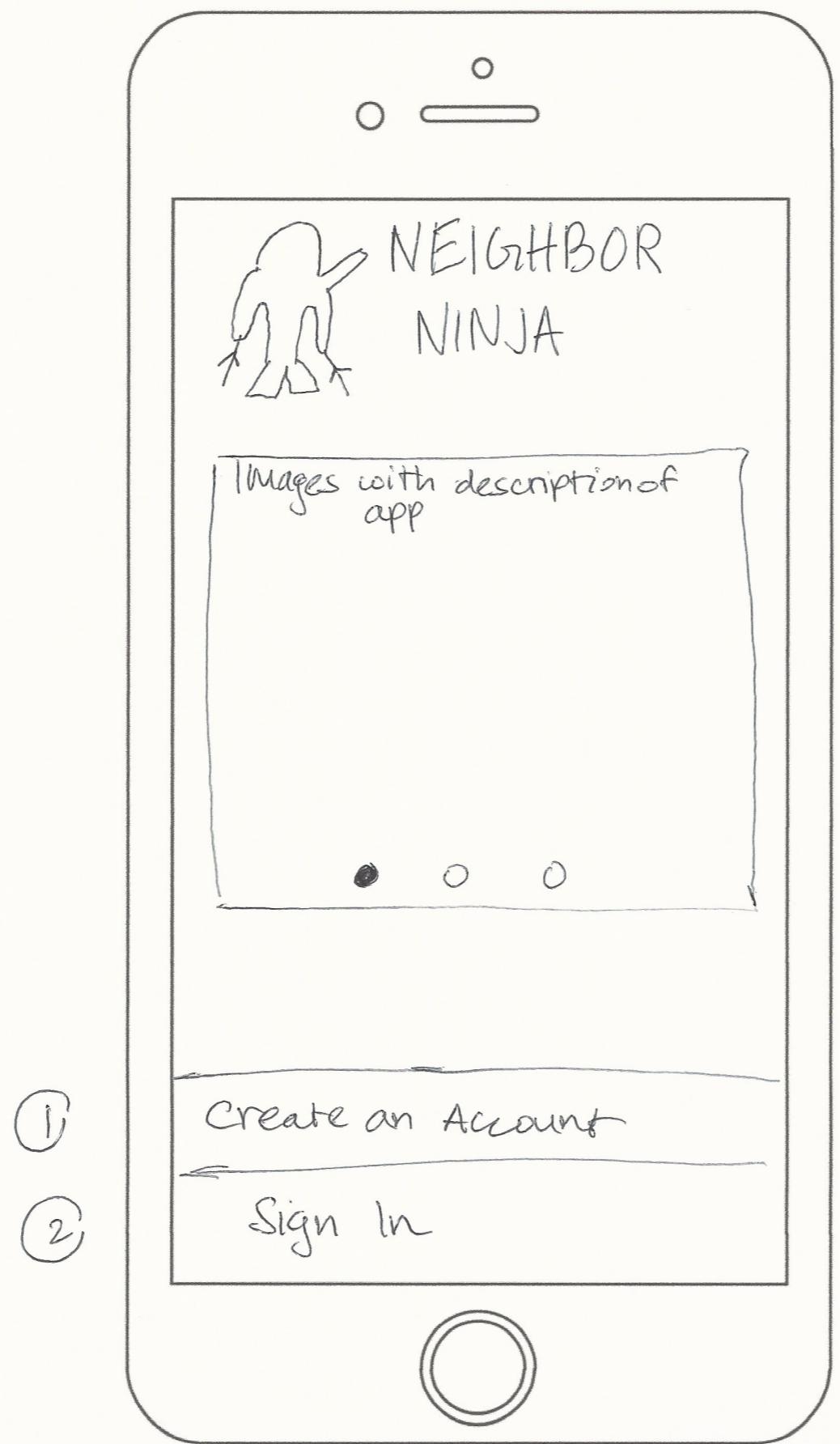
- ▶ **IOS APP WITH PUSH NOTIFICATIONS**
- ▶ **NO SET ADDRESS**
- ▶ **WILL TAKE CURRENT LAT/LONG OF USER**
- ▶ **TWO SIMPLE FEATURES FOR USERS**
- ▶ **REPORT SUSPICIOUS ACTIVITY**
- ▶ **VIEW USER-INPUTTED OR POLICE-RECORDED ACTIVITY IN AREA**
- ▶ **RADIUS IS DEFINED BY USER AND CAN BE CHANGED**



©APP START

SCREEN 0

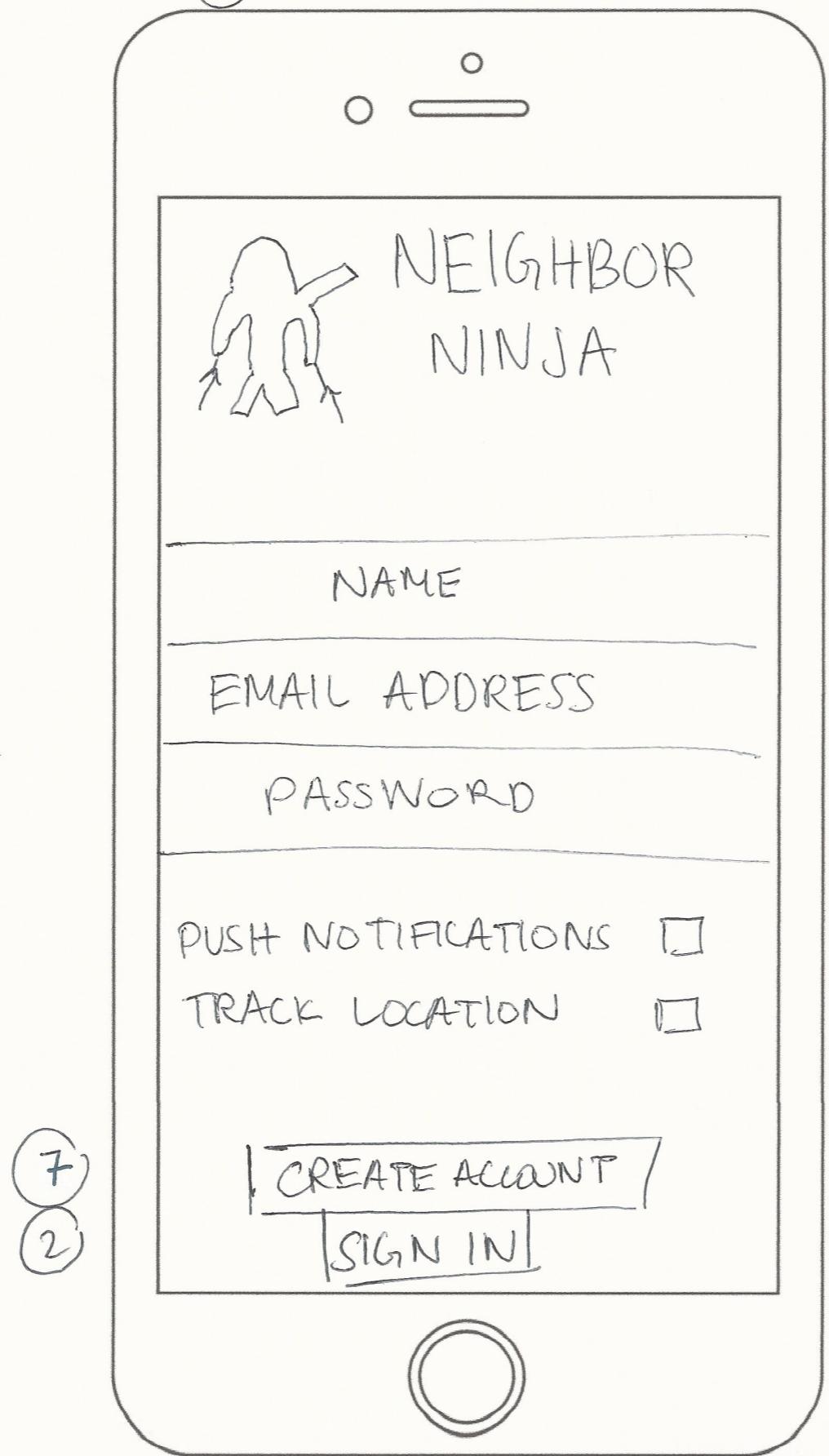
GETNNINJA.COM



①

②





② SIGN IN

SCREEN 2

GETNNINJA.COM

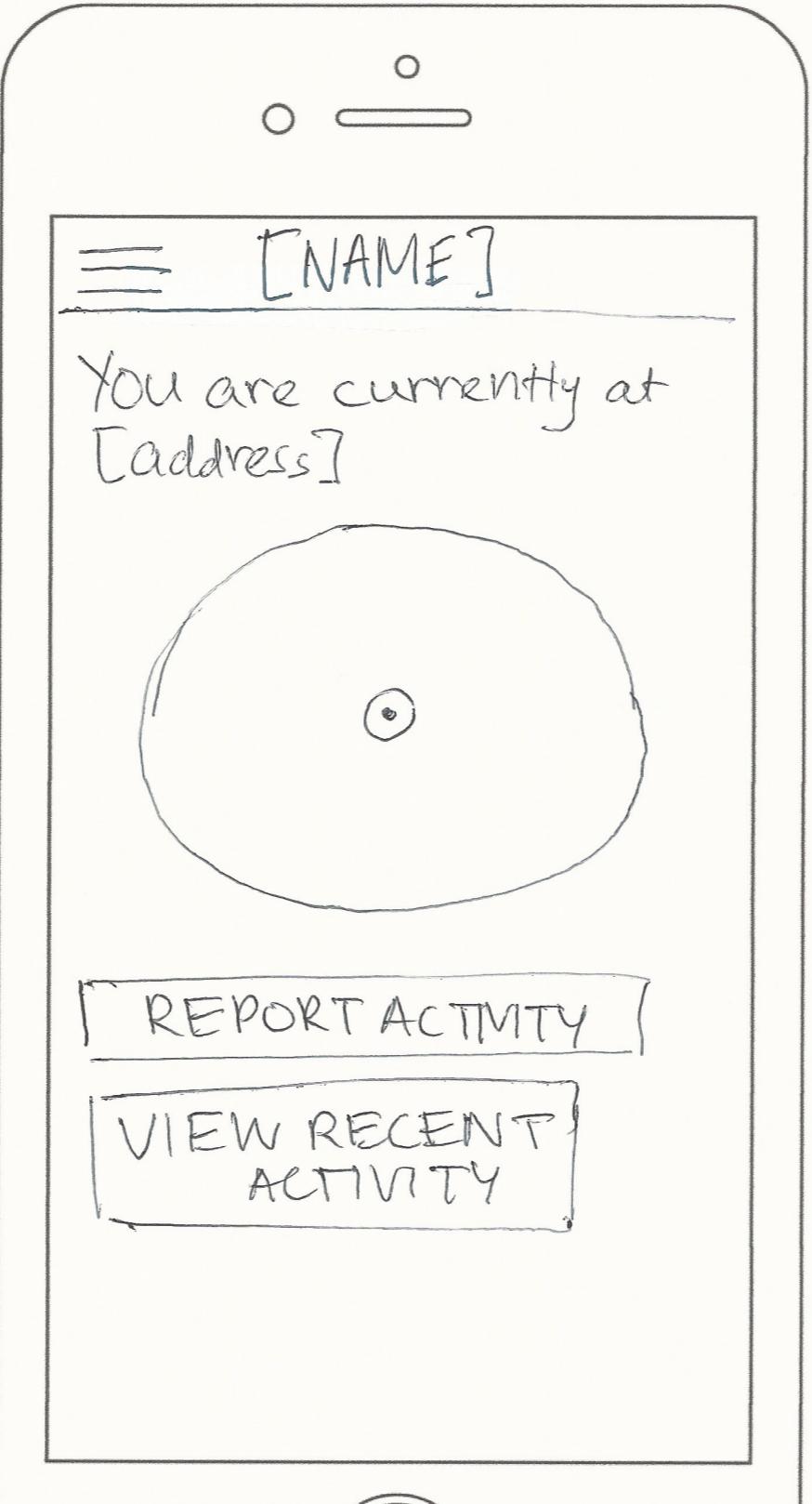


⑦

①

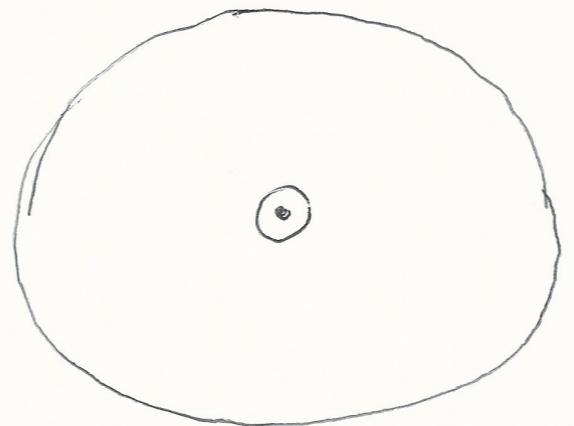


③



[NAME]

You are currently at  
[Address]



Location on  
Map With  
Radius

④

REPORT ACTIVITY

⑤

VIEW RECENT  
ACTIVITY



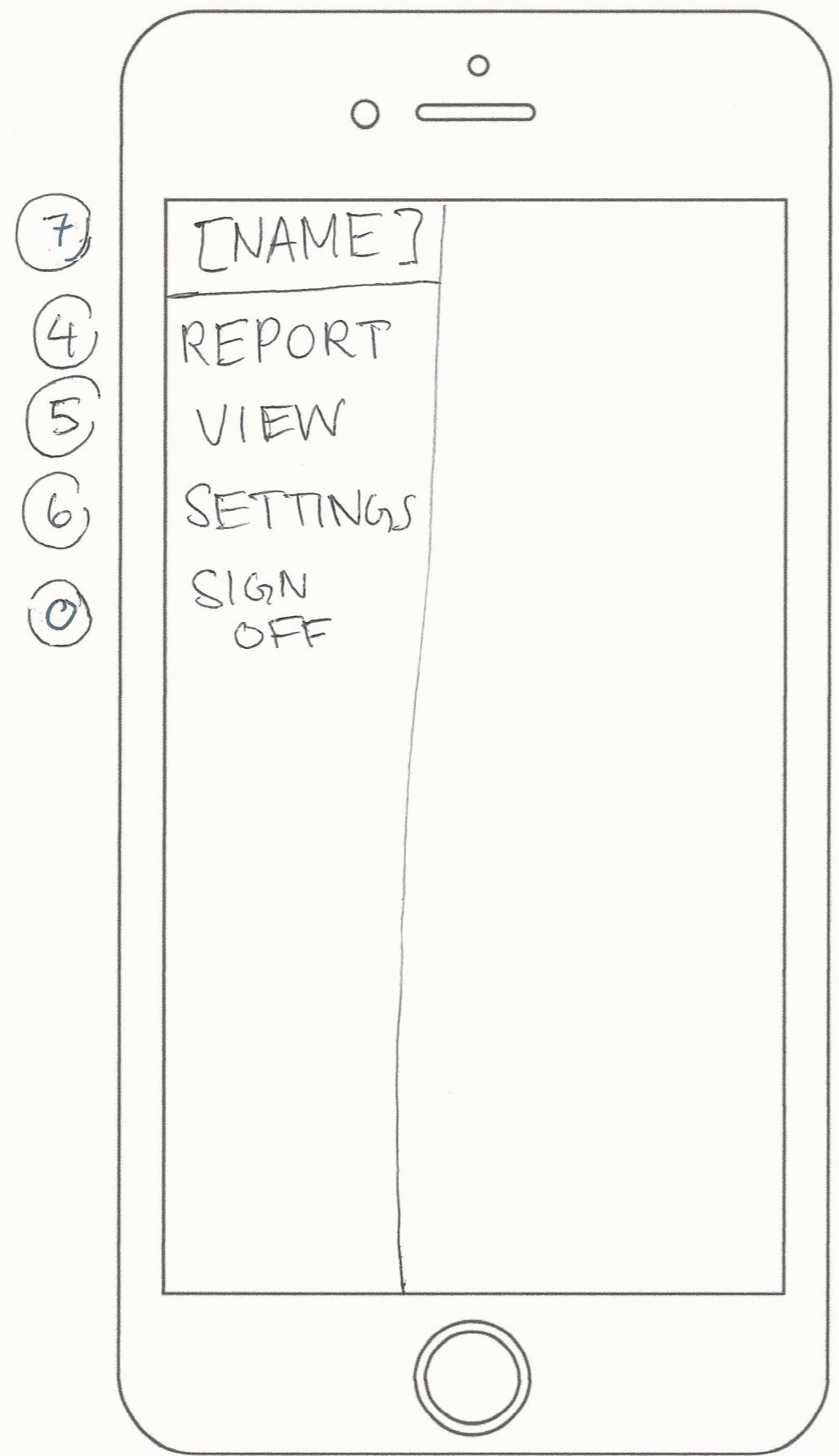
## SCREEN 3

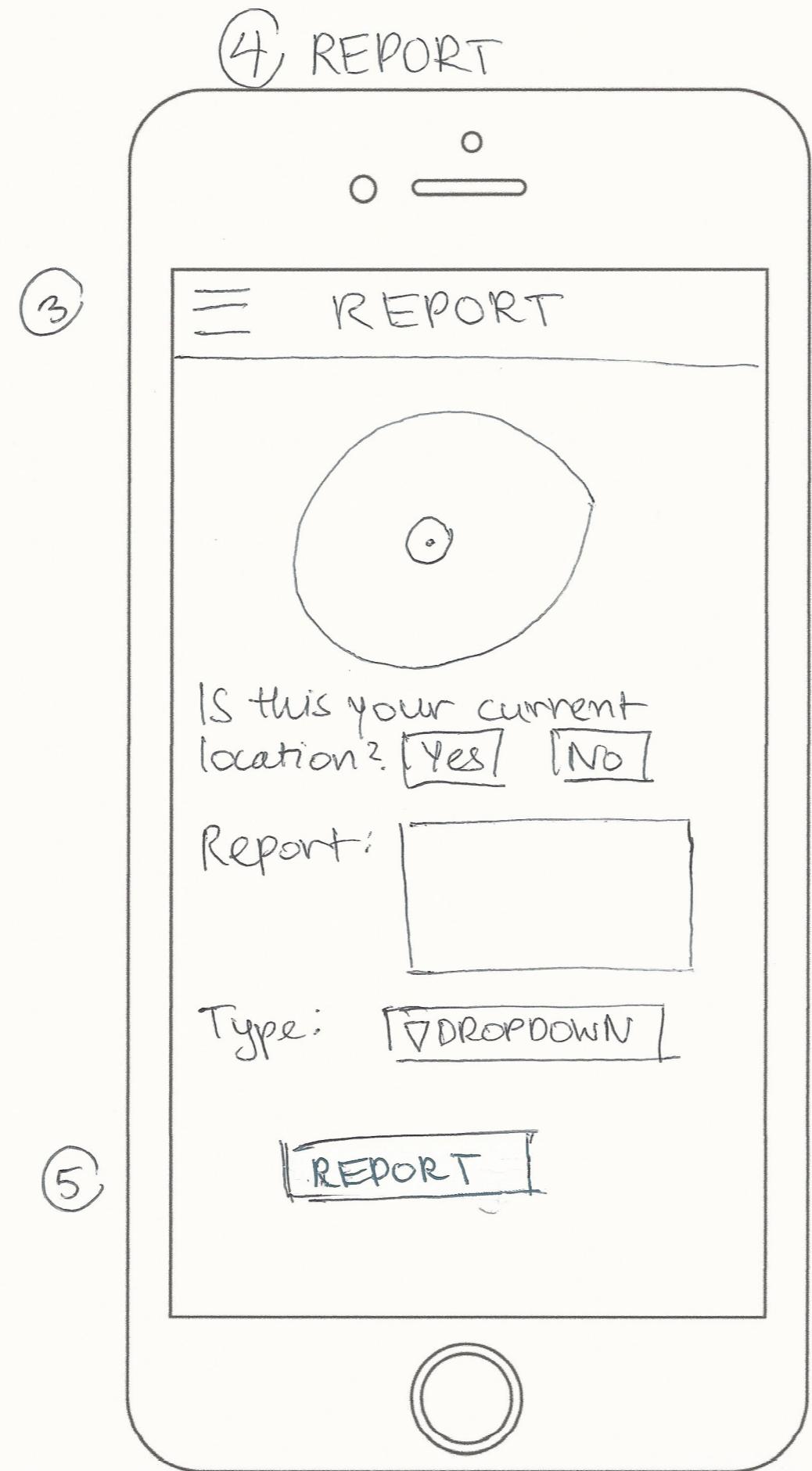
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### ③ SIDE BAR

GETNNINJA.COM

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Location on map with radius

IF "No" → refreshes location

Types:  
Arrest  
Arson  
Assault  
Burglary  
Robbery  
Shooting  
Theft  
Vandalism  
Other  
Unknown



## SCREEN 5

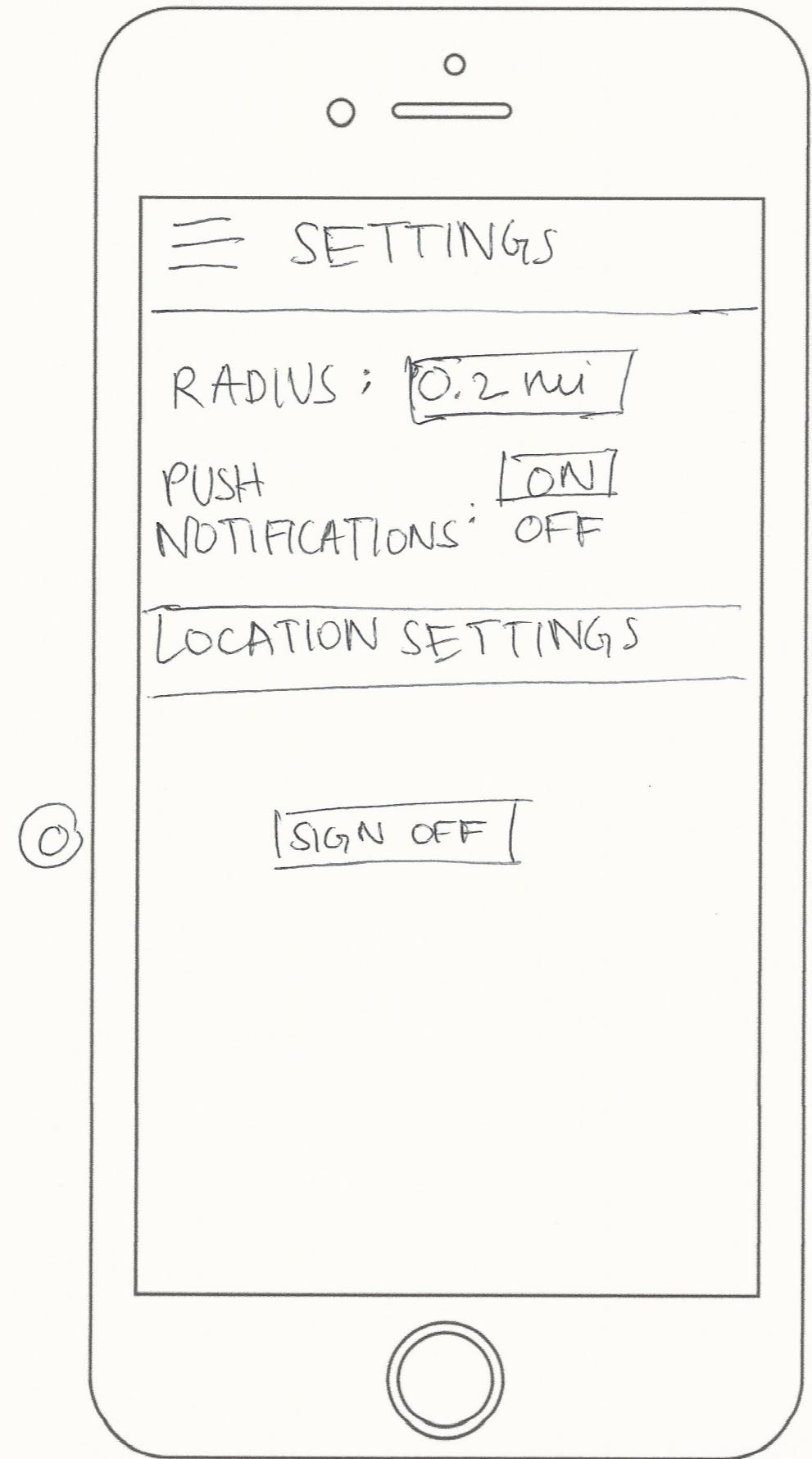
⑤ VIEW



- Details:
- ① User inputted vs police recorded
  - ② Type
  - ③ Time
  - ④ Location
  - ⑤ Report

GETNNINJA.COM





SETTINGS APP

⑦



- ▶ [\*\*SOCRATA.COM\*\*](#)
- ▶ [\*\*CRIMEREPORTS.COM\*\*](#)
- ▶ [\*\*SPOTCRIME.COM\*\*](#)
- ▶ **GOOGLE MAPS API**
- ▶ **SHOW LAT/LONG LOCATION ON MAP WITH RADIUS**



- ▶ [HTTP://WWW.MOVABLE-TYPE.CO.UK/SCRIPTS/LATLONG-DB.HTML](http://www.movable-type.co.uk/scripts/llatlong-db.html)
- ▶ **CREATES UPPER AND LOWER BOUNDS**
- ▶ **EFFICIENT**
- ▶ **FINDS OTHER USERS WITHIN CIRCLE DEFINED BY RADIUS**



MEETING 3

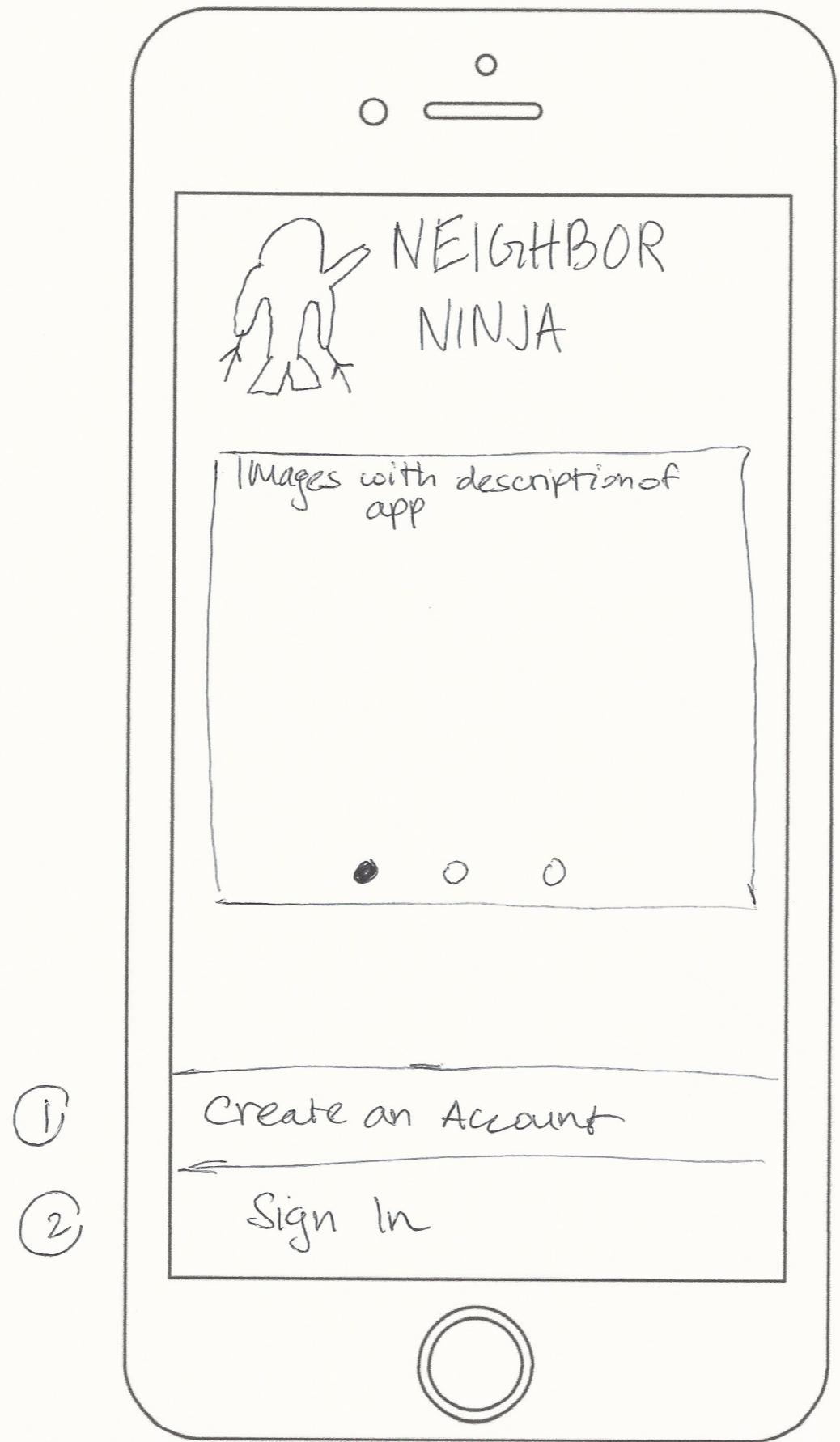
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NEIGHBOR NINJA

# SCREEN 0

@APP START

GETNNINJA.COM



## ① CREATE ACCOUNT



update:  
added address

update:  
prompts for  
location and  
notifications

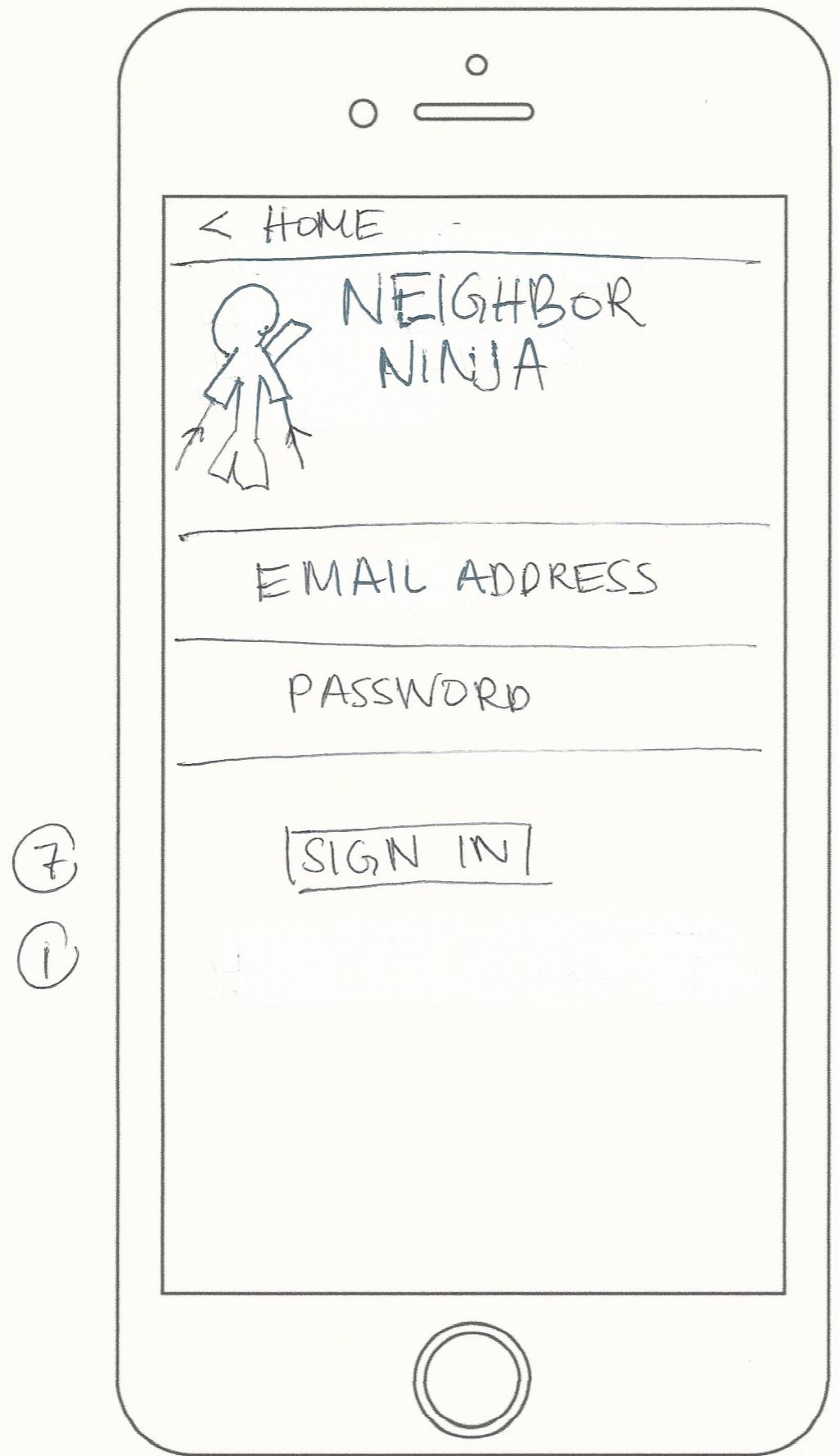
update:  
back instead of  
"sign in"



② SIGN IN

SCREEN 2

GETNNINJA.COM



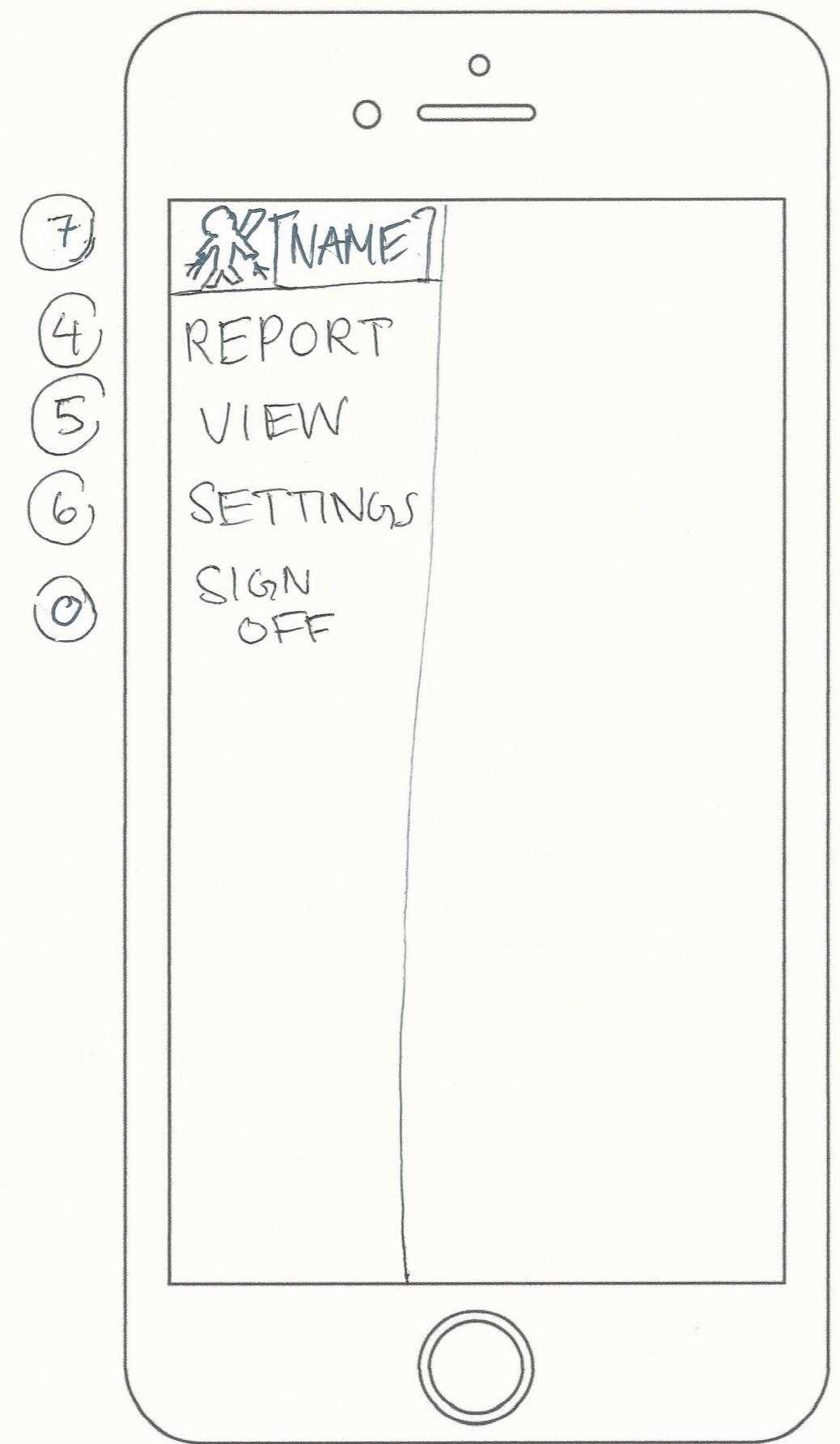
update:  
back button  
instead of  
create acc



### ③ SIDE BAR

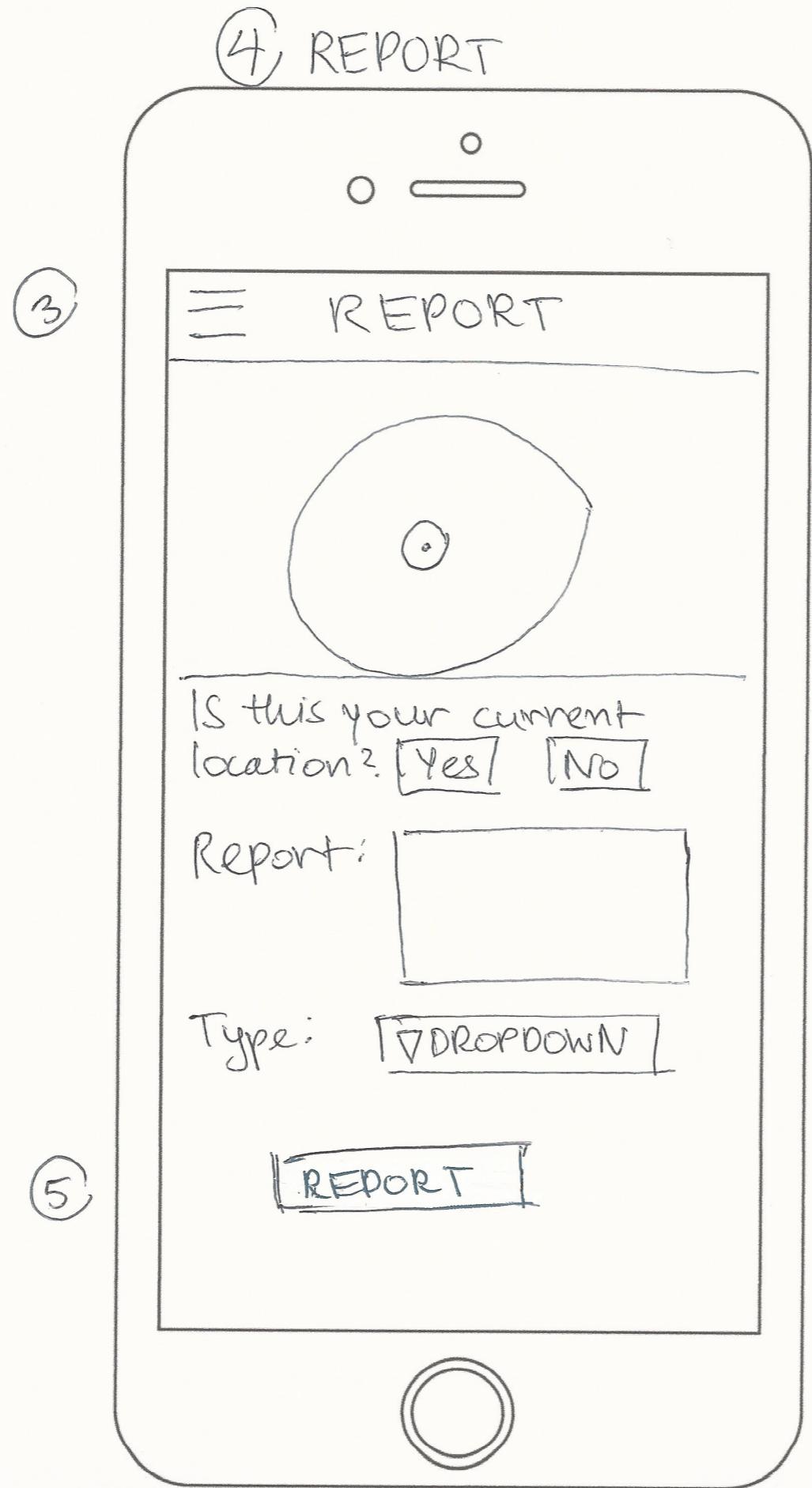
SCREEN 3

GETNNINJA.COM



update:  
insert logo





Location on  
map with  
Radius

If "No" →  
refreshes  
location

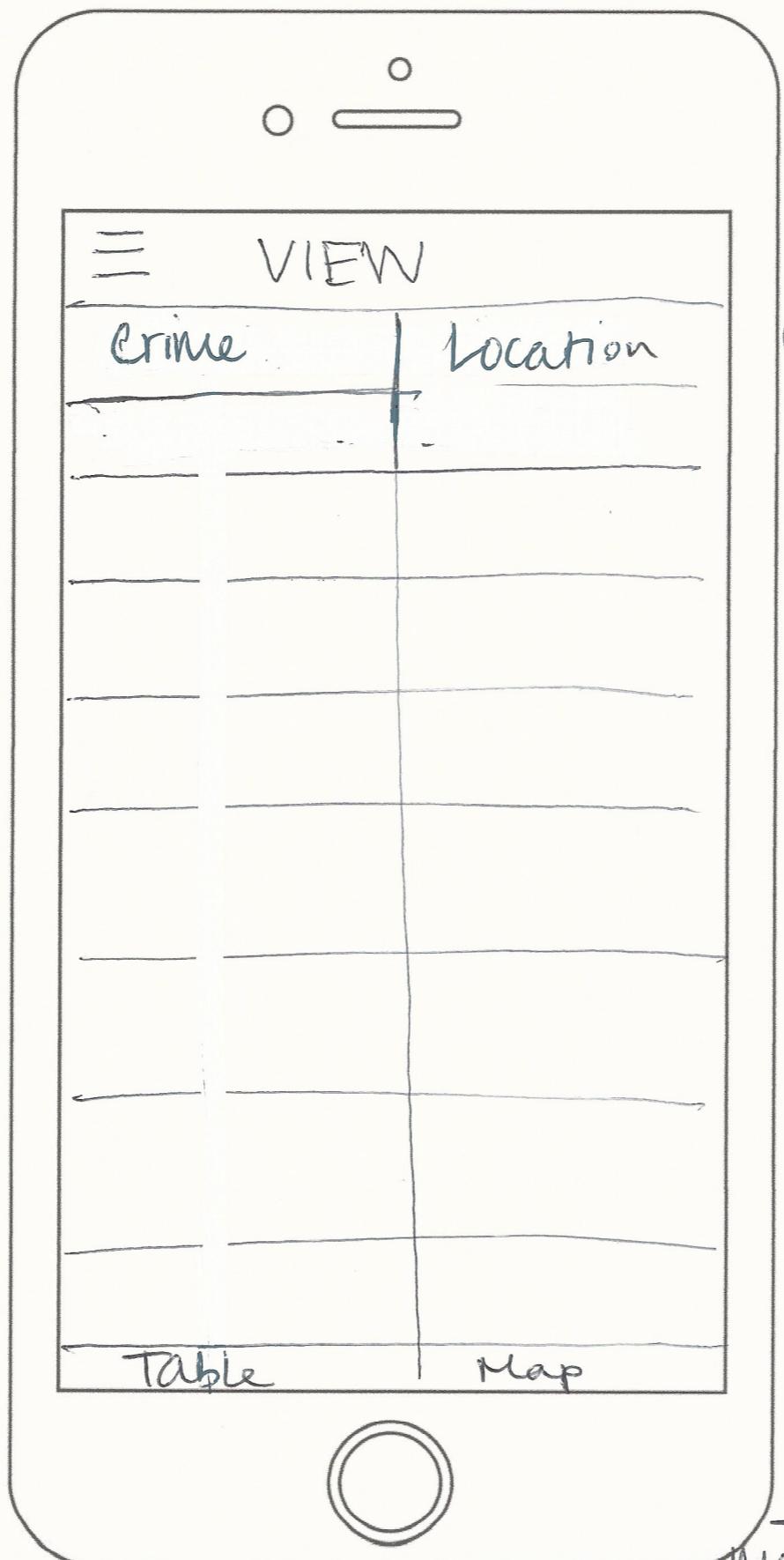
Types:  
Arrest  
Arson  
Assault  
Burglary  
Robbery  
Shooting  
Theft  
Vandalism  
Other  
Unknown



## SCREEN 5

⑤ VIEW

③



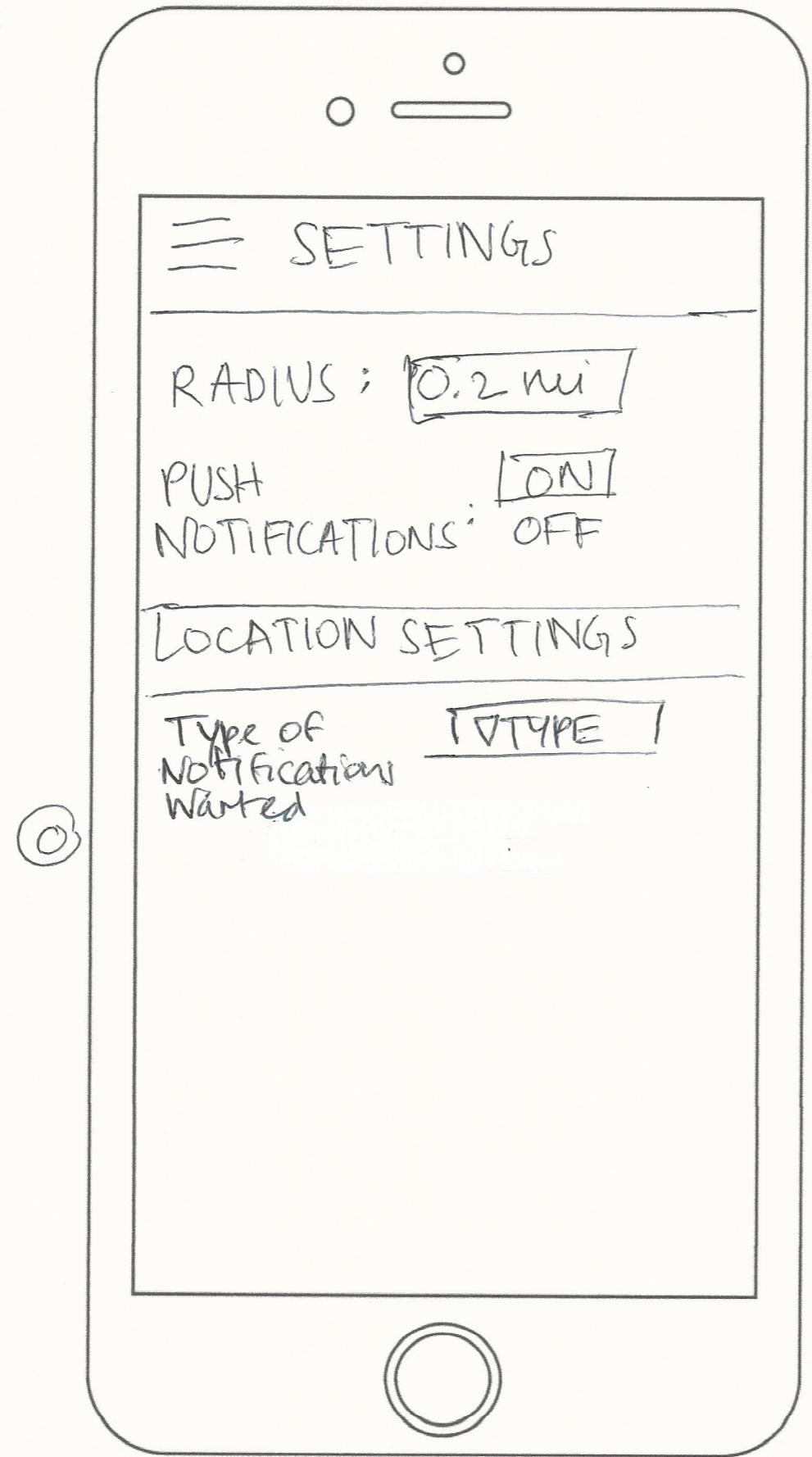
Details:

- ① User inputted vs police recorded
- ② Type
- ③ Time
- ④ Location
- ⑤ Report

update:  
click on  
Map →  
Map w/ pins  
click on crime  
→ zoom to  
Map w/ details  
and pin

GETNNINJA.COM

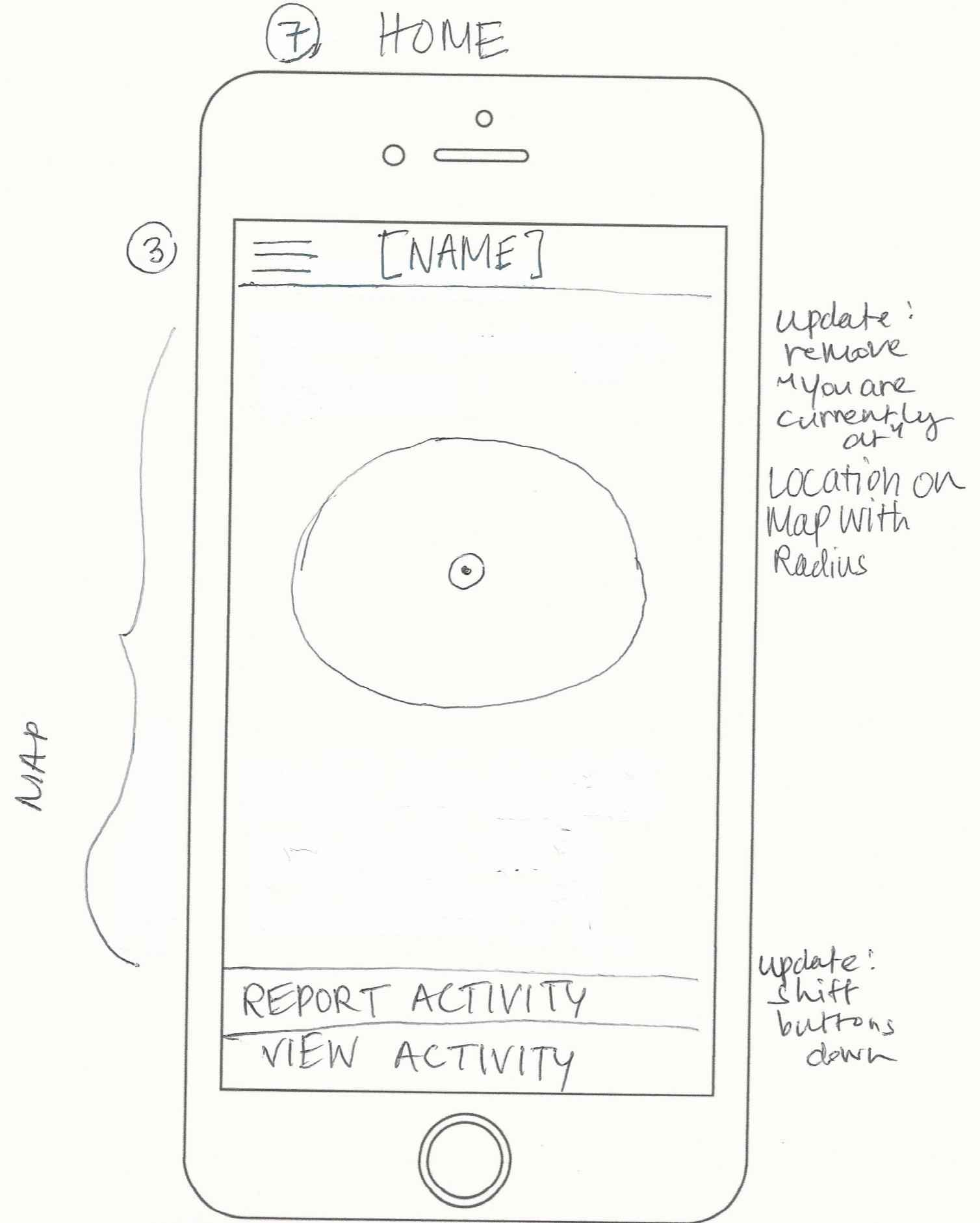




SETTINGS APP

update:  
- removed  
sign off  
button  
- type setting





- ▶ **USER REPORT: CURRENT LOCATION**
- ▶ **USER NOTIFICATION: HOME LOCATION**
- ▶ **APPLE MAPS**
- ▶ **ALAMEDA COUNTY BETA**



- ▶ **ALAMEDA COUNTY DATA**
- ▶ **SOCRATA API**
- ▶ **DATABASE CONNECTION**
- ▶ **CIRCLE ON MAP VIEW**
- ▶ **LABEL RELOADS AFTER I QUIT AND REOPEN APP**



- ▶ **DATABASE DESIGN**
- ▶ **DEMO ACCOUNT REGISTRATION, LOGIN, DUMMY HOME PAGE**
- ▶ **SODA SDK TEST**



- ▶ **JULY 1 - JULY 22: BUILD**
- ▶ **JULY 22 - JULY 29: DESIGN (MAKE MORE APPEALING), FINAL TOUCH UPS**
- ▶ **JULY 29 - AUGUST 5: MARKET  
END OF INTERNSHIP**
- ▶ **AUGUST 5 - AUGUST 26: ALAMEDA COUNTY BETA**
- ▶ **AUGUST 26 - FUTURE: CHANGES BASED ON BETA, EXPAND TO OTHER COUNTIES**

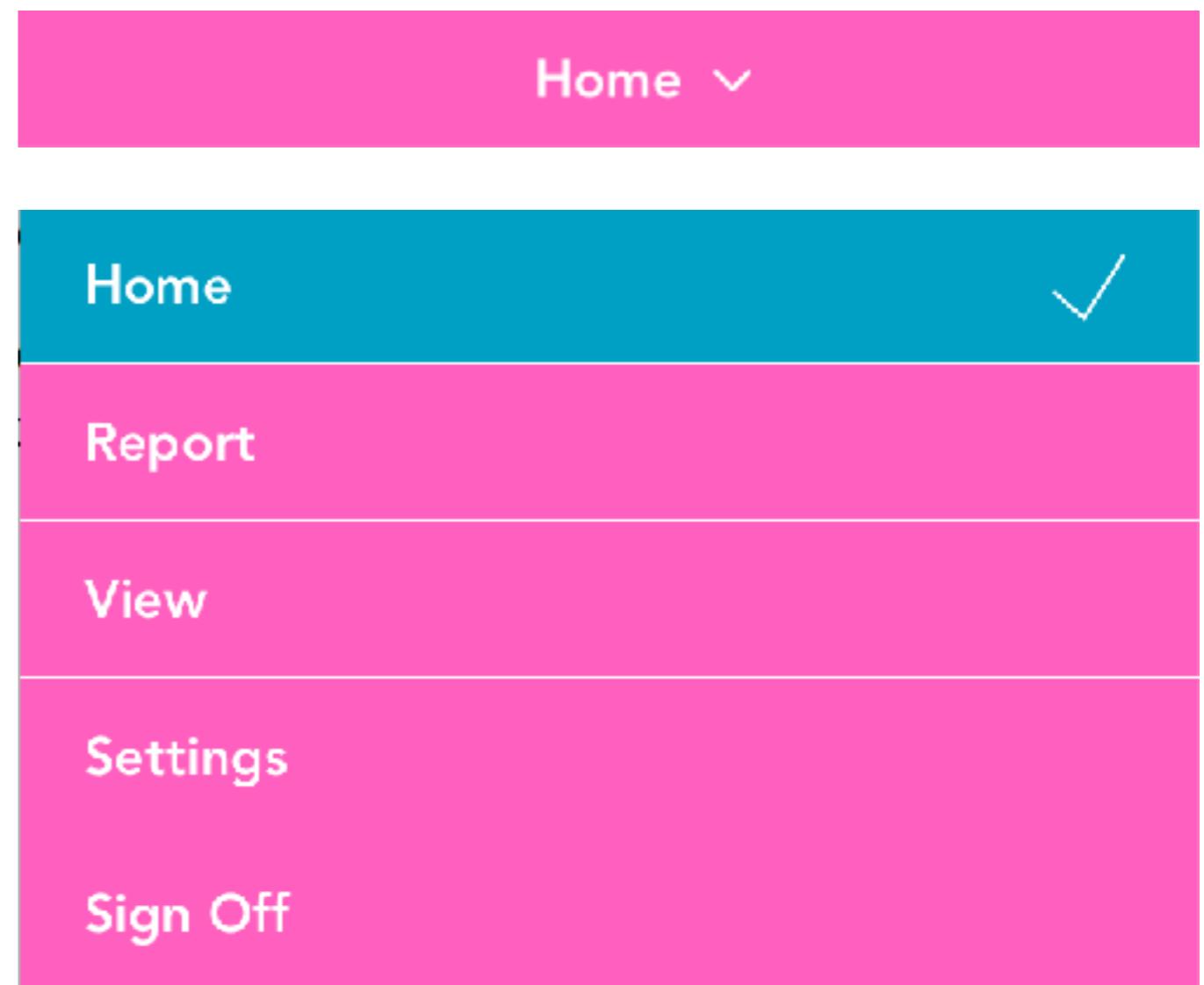
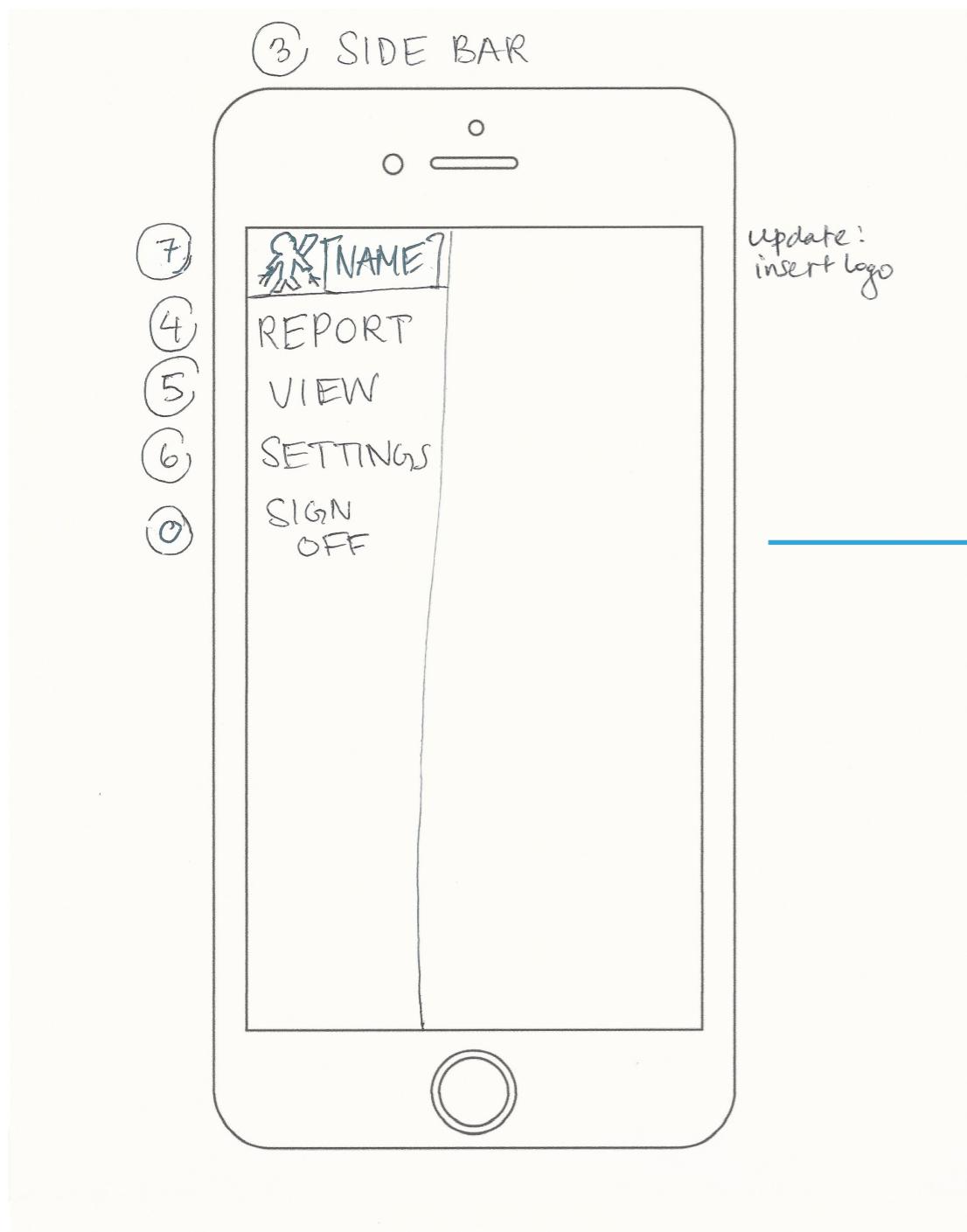


MEETING 4

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NEIGHBOR NINJA

# ► NAVIGATION BAR



## ► DESIGN

### ► PINK THEME TBD

### ► ADDRESS FIELD

### ► DB CONNECTION

### ► UPDATED DB TABLE (DESCRIPTION)

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action		
1	<b>ID</b> 	int(11)			No	None	AUTO_INCREMENT	 Change	 Drop	 More
2	<b>timestamp</b>	timestamp			No	CURRENT_TIMESTAMP		 Change	 Drop	 More
3	<b>type</b>	varchar(255)	latin1_swedish_ci		No	None		 Change	 Drop	 More
4	<b>userid</b>	int(11)			No	None		 Change	 Drop	 More
5	<b>lat</b>	float(10,6)			No	None		 Change	 Drop	 More
6	<b>lng</b>	float(10,6)			No	None		 Change	 Drop	 More
7	<b>description</b>	varchar(255)	latin1_swedish_ci		No	None		 Change	 Drop	 More



- ▶ **VIEW REPORTED CRIMES BASED ON ADDRESS**
- ▶ **LAT/LONG OF ADDRESS/CURRENT LOCATION BEING SAVED**
- ▶ **LOCAL VS DB INFO**



- ▶ REMOTE ACCESS TO DB
- ▶ [GETNNINJA.COM](http://GETNNINJA.COM)
- ▶ INFO/BLOG
- ▶ SEPARATING LAT/LONG STRING FROM COUNTY DB TO MAP IT

Location 1	More
(37.67705445°, -122.11298064°)	
(37.71437982°, -122.02231781°)	
(37.66655037°, -122.10000611°)	
(37.66655037°, -122.10000611°)	
(37.66655037°, -122.10000611°)	
(37.68589075°, -122.06327902°)	
(37.69781444°, -122.10989918°)	
(37.75294423°, -122.16037789°)	
(37.75294423°, -122.16037789°)	
(37.69781444°, -122.10989918°)	
(37.76260104°, -122.20690898°)	



- ▶ THIS WEEK:
  - ▶ INVITE FUNCTION
  - ▶ SEARCH FUNCTION
  - ▶ ALL BASIC SCREENS
  - ▶ REPORT/SETTINGS
  - ▶ “NEIGHBORS” SCRIPT
- ▶ NEXT WEEK
- ▶ PUSH NOTIFICATIONS (DEV ACC, AWS)



- ▶ CONSOLIDATE OLD CRIMES
- ▶ IDENTIFY DUPLICATES
- ▶ COMPARE LAT/LONG & TIME



MEETING 5

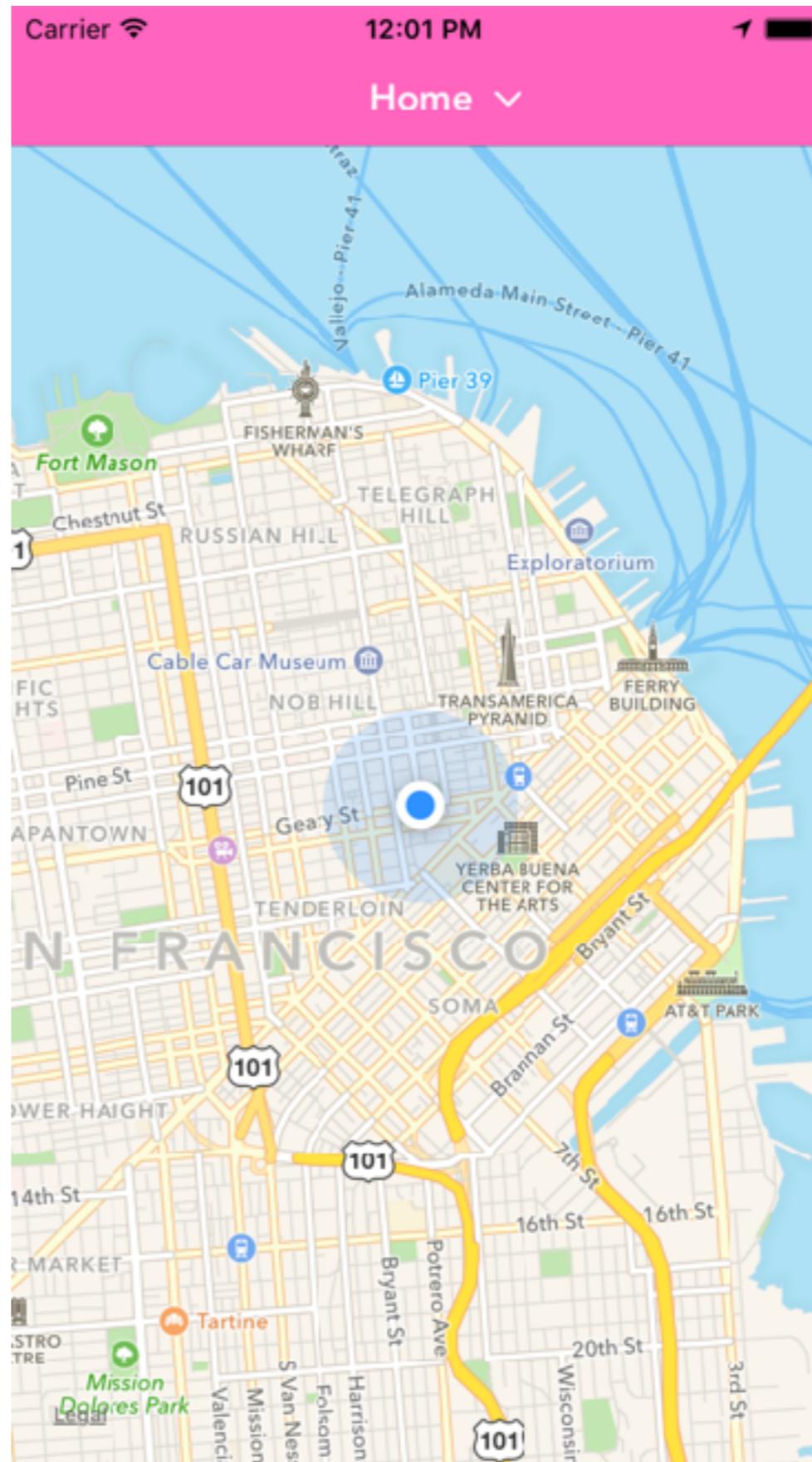
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NEIGHBOR NINJA

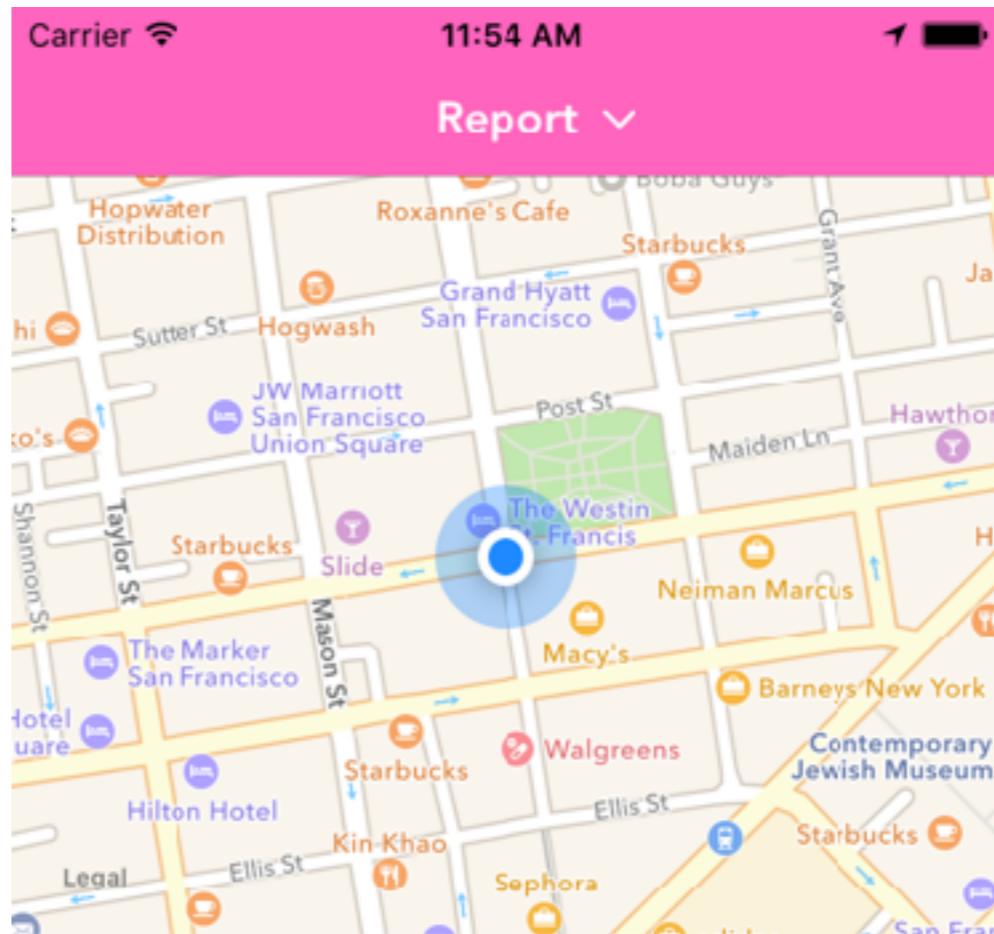
- ▶ GOT RID OF “BACK” BUTTON ON MOST SCREENS
- ▶ MADE LAT/LONG LONGER IN DATABASE FOR MORE ACCURATE LOCATIONS (15, 6) TO (15, 8)
- ▶ “CRIMEREPORT” DB
- ▶ “NEIGHBORS” SCRIPT
- ▶ BOX AROUND USER



# ▶ HOME SCREEN



# ► REPORT SCREEN



Radius: 10000.0 m

Description of Activity

Arrest

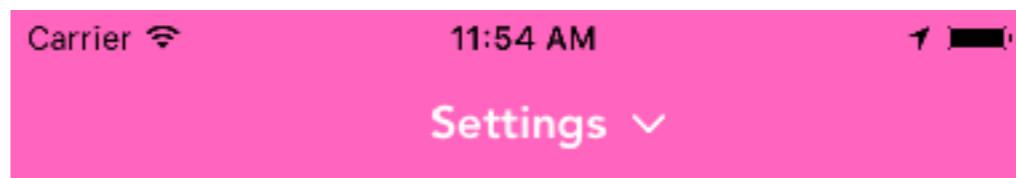
Arson

Assault

Submit Report



# ▶ SETTINGS SCREEN



Current Radius: 10000.0 m

[ New Radius ]

Change Radius



► **SEPARATING LAT/LONG FROM STRING**



- ▶ THIS WEEK:
  - ▶ SWITCH TO AWS
  - ▶ SIGN UP FOR APPLE DEV ACCOUNT
  - ▶ IMPLEMENT PUSH NOTIFICATIONS
  - ▶ PARSE LAT/LONG STRING TO DISPLAY ON MAP
  - ▶ SEARCH FUNCTION
  - ▶ SUBMITTED CRIMES IN TABLE



- ▶ **NEXT WEEK:**
  - ▶ **LOCAL TESTING**
  - ▶ **AUTO-LAYOUT**
- ▶ **IN TWO WEEKS:**
  - ▶ **PUBLISH TO APP STORE**
  - ▶ **MARKET**
  - ▶ **START ALAMEDA COUNTY BETA**
  - ▶ **UPDATE BASED ON FEEDBACK**



- ▶ CURRENT LOCATION AS ADDRESS WHEN SIGNING UP
- ▶ TYPES OF PUSH NOTIFICATIONS WANTED
- ▶ IDENTIFYING SPAM/DUPLICATES
- ▶ CONSOLIDATING OLD CRIMES



MEETING 6

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NEIGHBOR NINJA

- ▶ CONNECTED TO AWS
- ▶ CAN BE ACCESSED BY ANY IOS DEVICE
- ▶ FINDING GLITCHES WHILE TESTING
- ▶ TAB BUTTON
- ▶ MAPPING CRIMES



- ▶ **RUNNING ON SIMULATOR VS RUNNING ON DEVICE**
- ▶ **SETTING UP EC2 SERVER ON AWS**



- ▶ **7/21 - 7/28**
  - ▶ **PUSH NOTIFICATIONS**
  - ▶ **LOCAL TESTING AND UPDATES**
- ▶ **7/28 - 8/4**
  - ▶ **DESIGN (AUTO-LAYOUT, VISUALLY APPEALING)**
  - ▶ **UPDATE WEBSITE (REDESIGN FOR BETA)**
  - ▶ **PUBLISH FOR BETA (INVITE CODES)**



- ▶ **8/18 - 8/25**
- ▶ **CONTINUE WITH UPDATING BASED ON FEEDBACK FROM BETA USERS**
- ▶ **UPDATE WEBSITE**
- ▶ **END BETA; ALLOW ALL USERS**
- ▶ **START MARKETING (POLICE DEPARTMENT, SOCIAL MEDIA)**



MEETING 7

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NEIGHBOR NINJA

- ▶ SERVER REMOTE ACCESS
- ▶ PUSH NOTIFICATIONS THROUGH FIREBASE
- ▶ DESIGN
- ▶ AUTO-LAYOUT



- ▶ RETRIEVING DEVICE/INSTANCE ID TO SEND NOTIFICATION TO SINGLE DEVICE



- ▶ **REFINE MAP FEATURE (BUGS)**
- ▶ **PUSH NOTIFICATIONS**
- ▶ **REFORMAT WEBSITE**
- ▶ **TESTING**
- ▶ **MINOR UPDATES**
- ▶ **SET MAXIMUM RADIUS**
- ▶ **ADD BACK BUTTONS WHERE NEEDED**
- ▶ **DEPLOY AS BETA**



- ▶ RECEIVE FEEDBACK AND IMPROVE
- ▶ START MARKETING
- ▶ MAKE SURE MAJOR BUGS ARE FIXED BEFORE  
RELEASETING TO PUBLIC
- ▶ SECURITY



- ▶ GET INFO FROM DB INSTEAD OF LOCALLY
- ▶ INVITE FUNCTION
- ▶ SEARCH BAR
- ▶ DISPLAY USER-INPUTTED CRIMES ON HOME MAP
- ▶ CURRENT LOCATION INSTEAD OF HOME ADDRESS  
DURING SIGN UP
- ▶ TYPES OF PUSH NOTIFICATIONS
- ▶ IDENTIFYING SPAM/DUPLICATES

