MICHIGAN STATE UNIVERSITY

Alpha Presentation
Resident Physician Shift Tracking

The Capstone Experience

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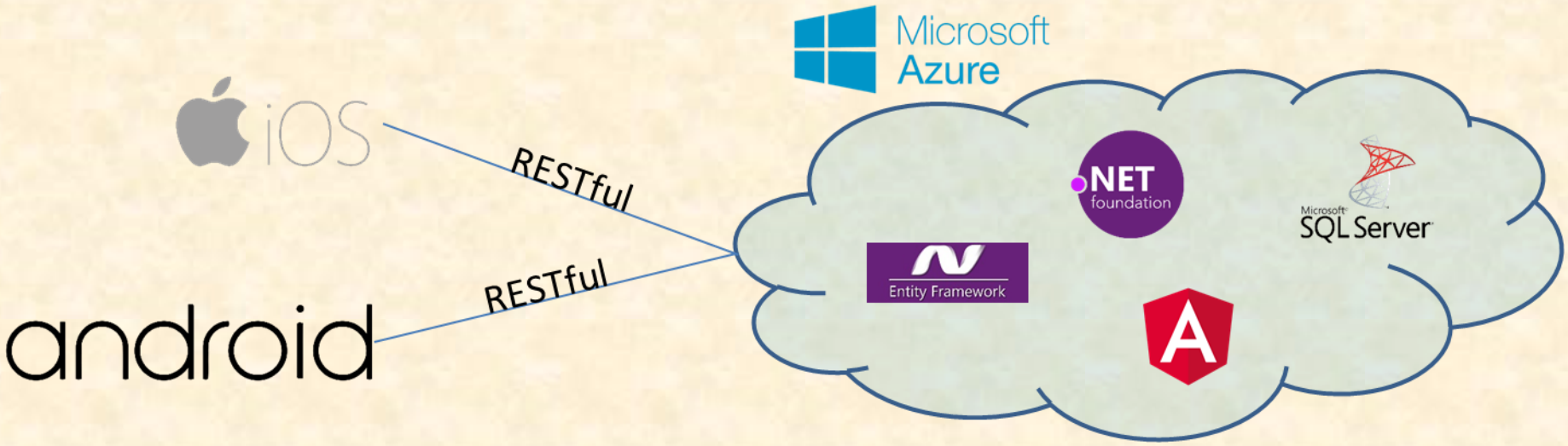
From Students…
…to Professionals

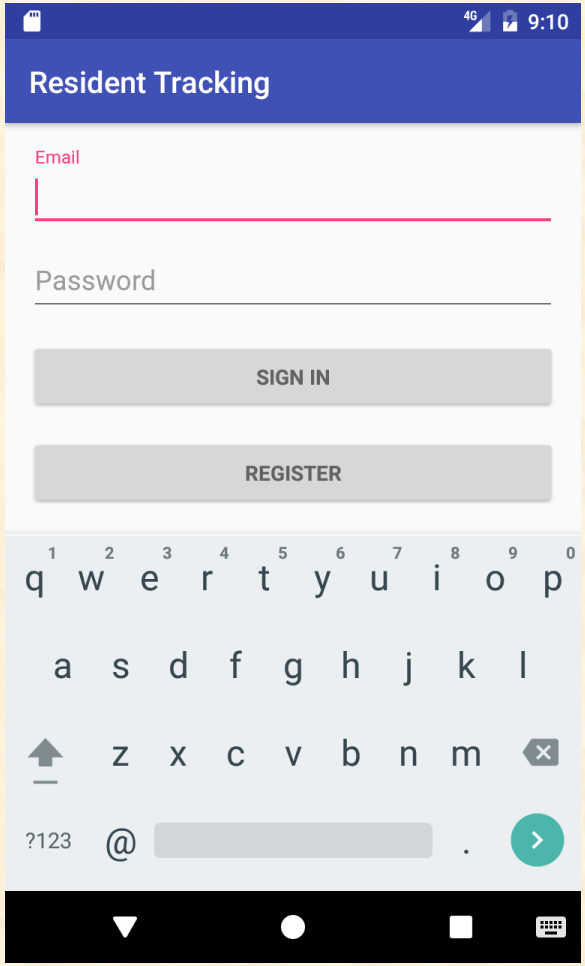
Project Overview

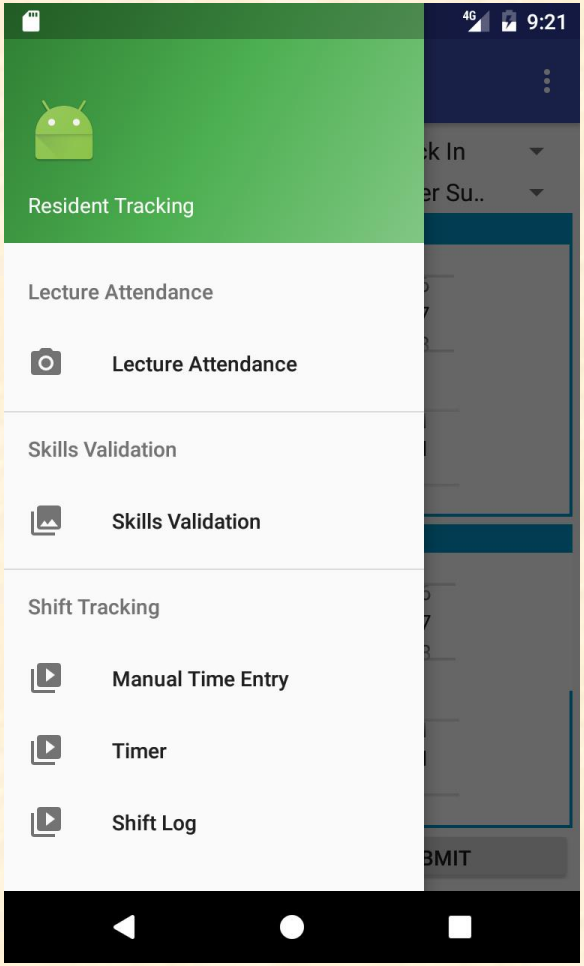
- Android and iOS app for residents to report and track their shift times
- Admin web portal for Resident Coordinator to view the residents' shift times and export the data to a CSV file
- Push notifications on the app to alert the resident when federal time restrictions are approaching

System Architecture

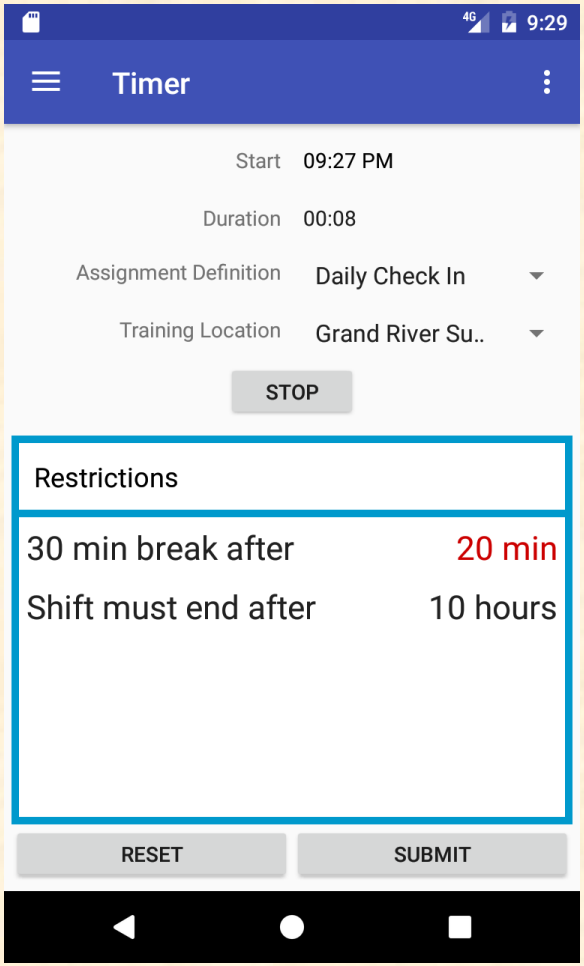


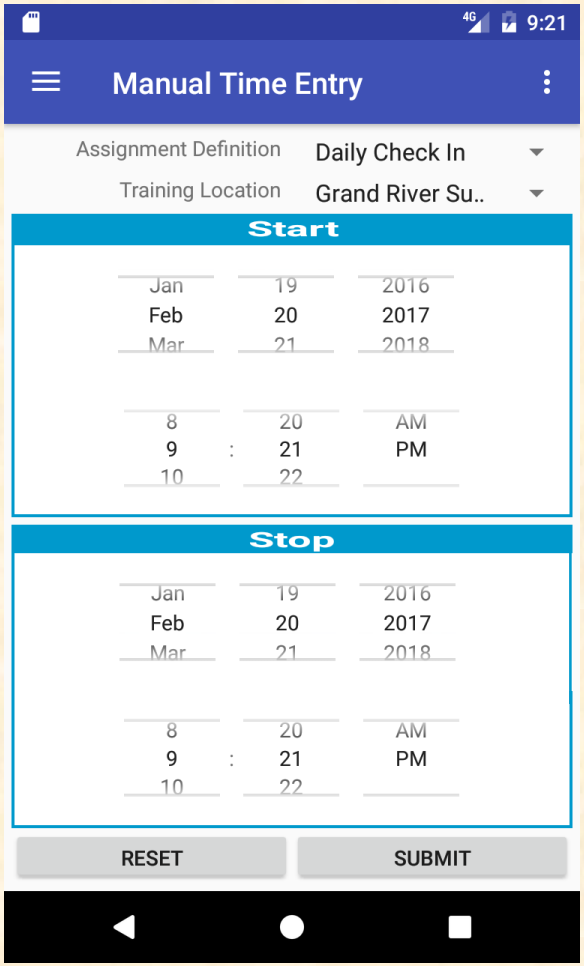
Android: Login and Menu

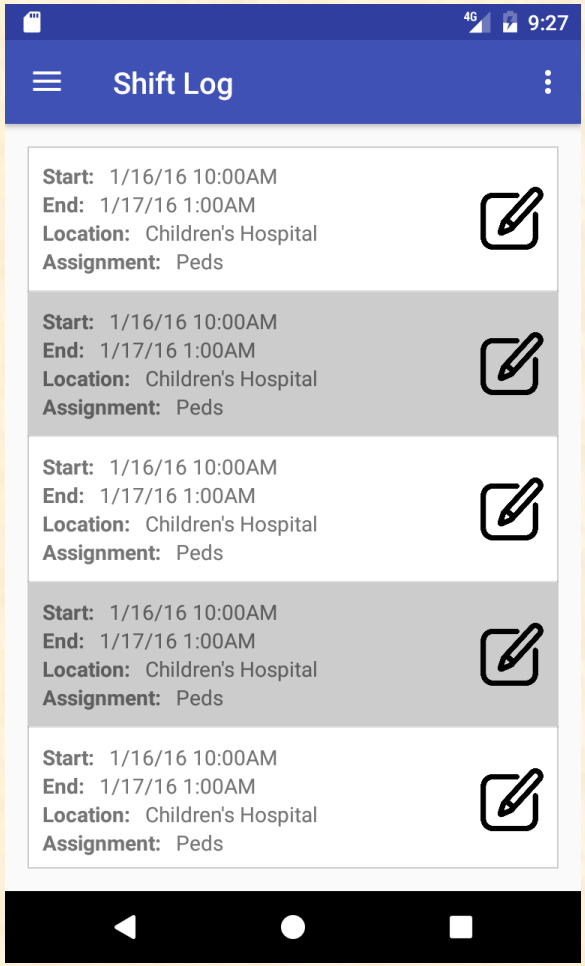




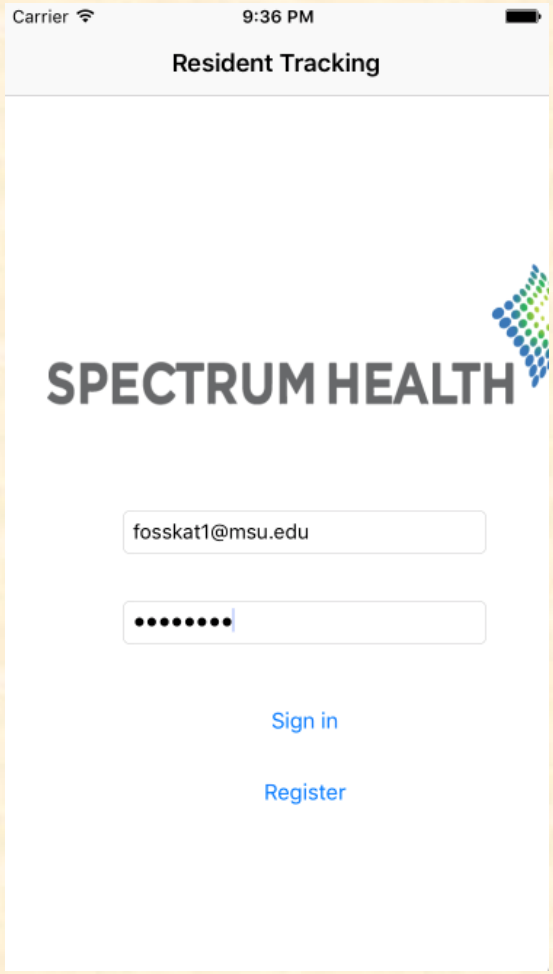
Android: Shift Tracking Features



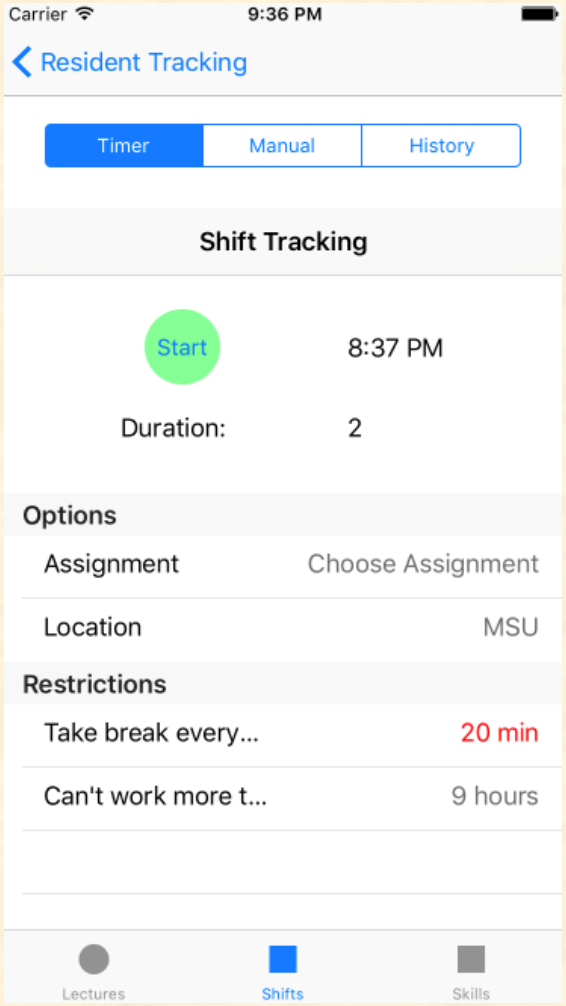


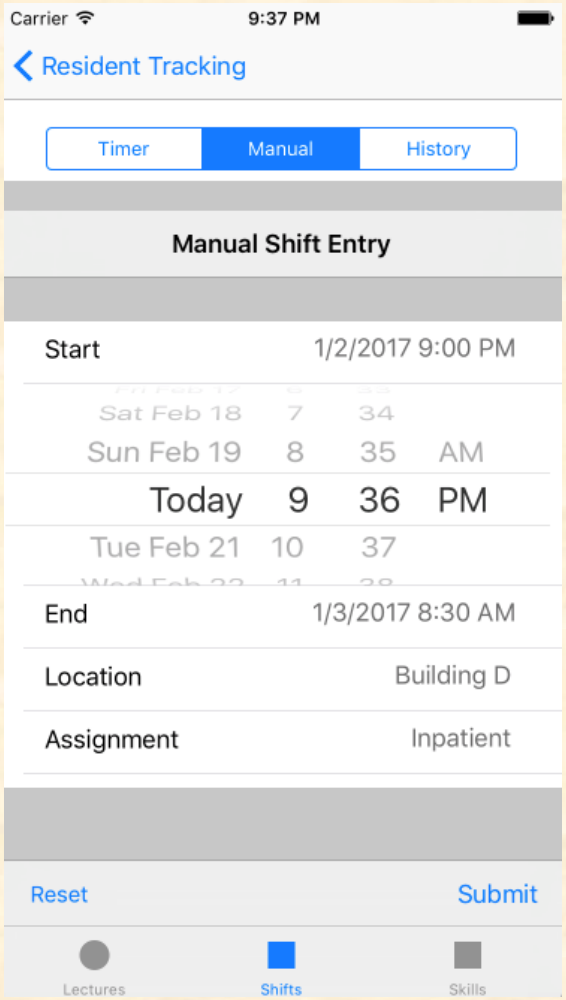


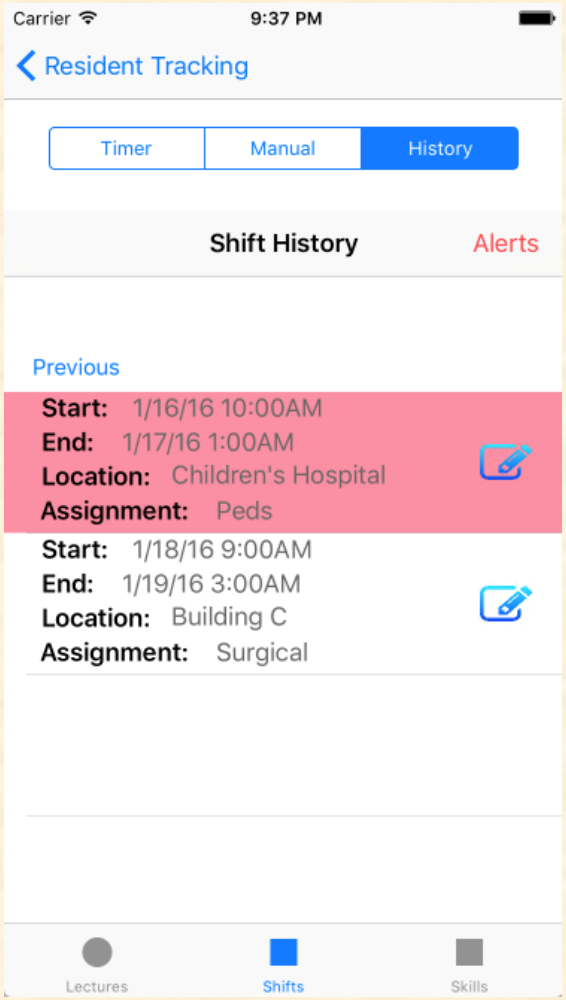
iOS: Login


Carrier
9:36 PM
Resident Tracking
SPECTRUM HEALTH
fosskat1@msu.edu
Sign in
Register

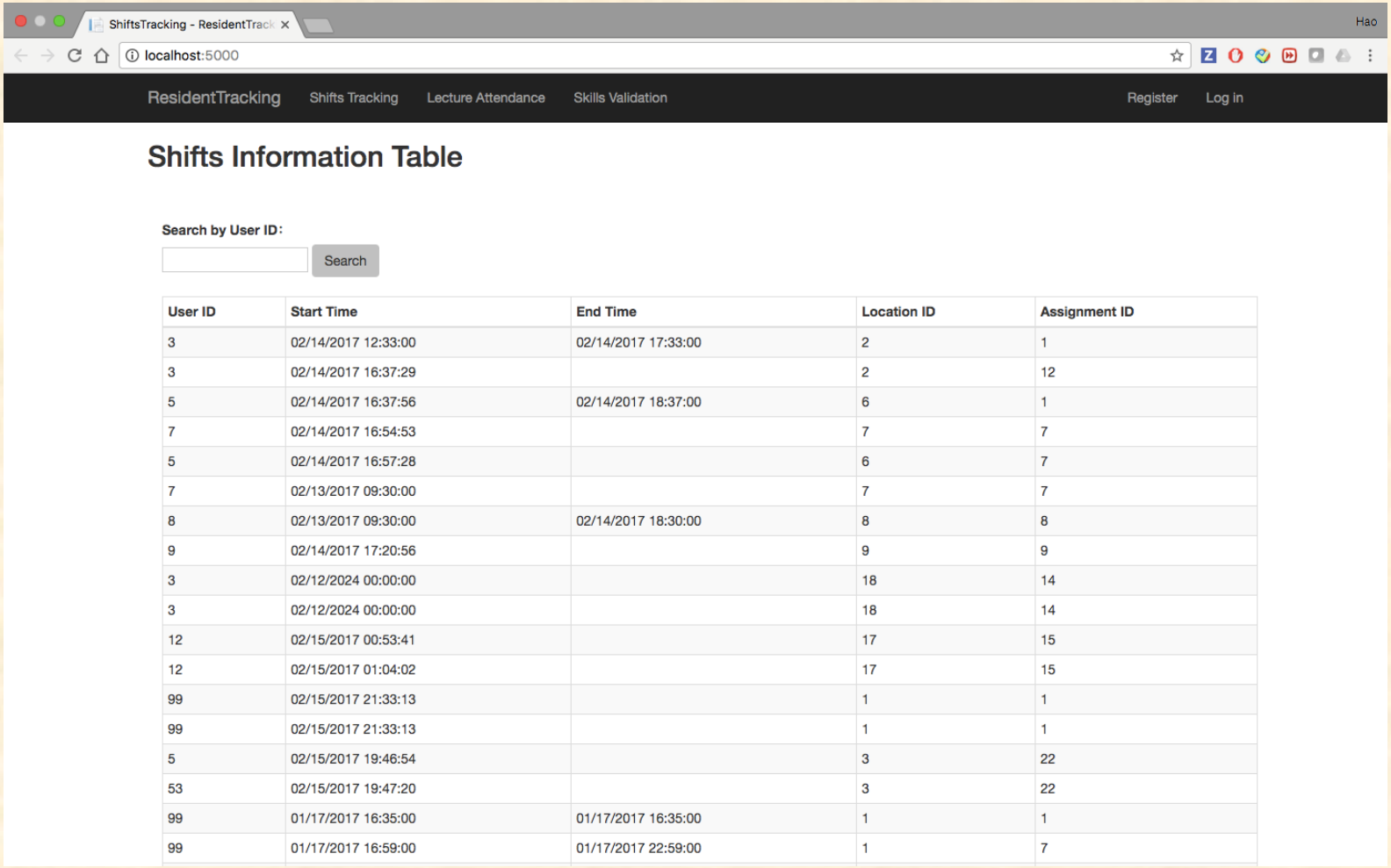
iOS: Shift Tracking Features





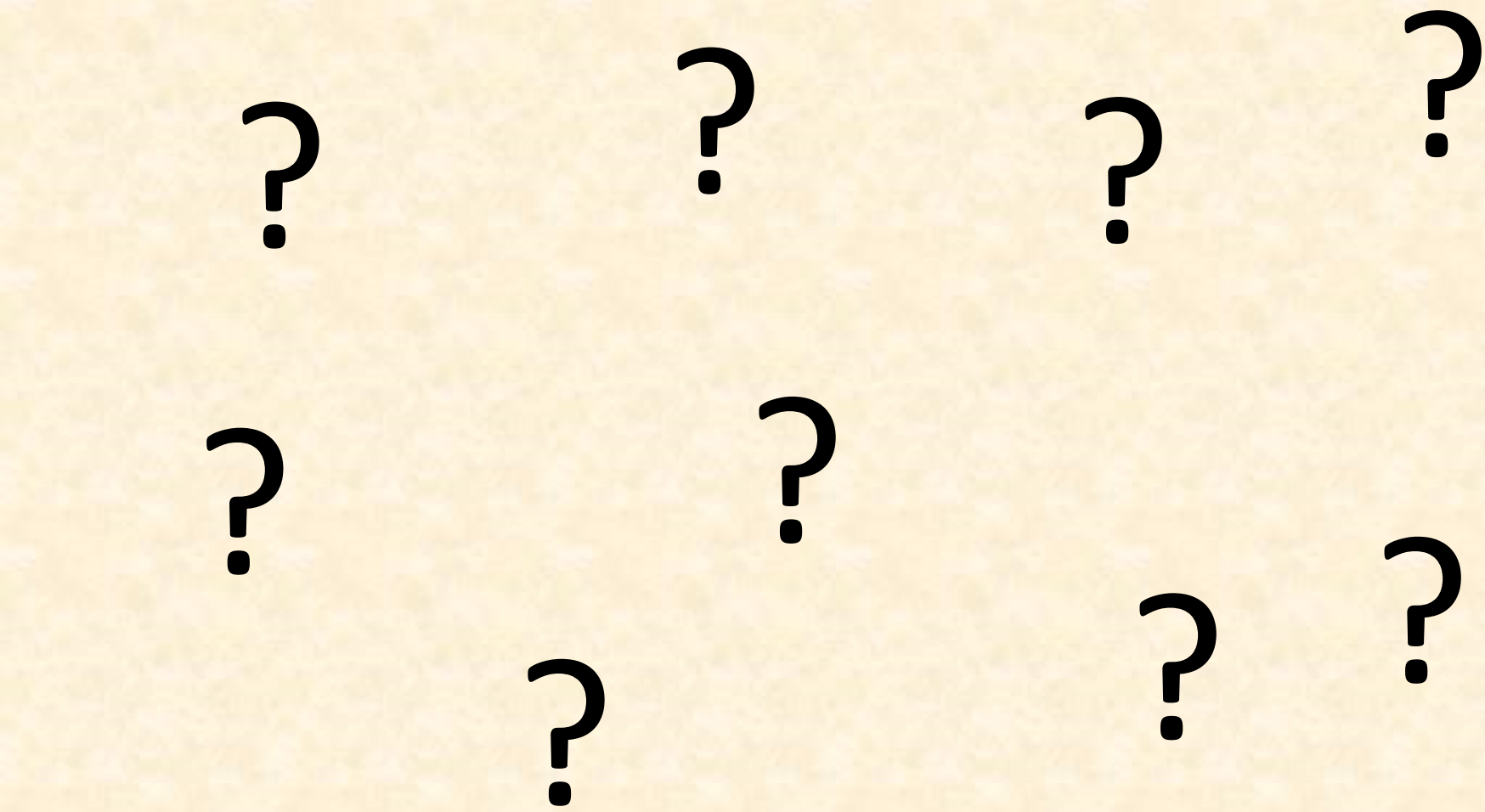


Web Portal



User ID	Start Time	End Time	Location ID	Assignment ID
3	02/14/2017 12:33:00	02/14/2017 17:33:00	2	1
3	02/14/2017 16:37:29		2	12
5	02/14/2017 16:37:56	02/14/2017 18:37:00	6	1
7	02/14/2017 16:54:53		7	7
5	02/14/2017 16:57:28		6	7
7	02/13/2017 09:30:00		7	7
8	02/13/2017 09:30:00	02/14/2017 18:30:00	8	8
9	02/14/2017 17:20:56		9	9
3	02/12/2024 00:00:00		18	14
3	02/12/2024 00:00:00		18	14
12	02/15/2017 00:53:41		17	15
12	02/15/2017 01:04:02		17	15
99	02/15/2017 21:33:13		1	1
99	02/15/2017 21:33:13		1	1
5	02/15/2017 19:46:54		3	22
53	02/15/2017 19:47:20		3	22
99	01/17/2017 16:35:00	01/17/2017 16:35:00	1	1
99	01/17/2017 16:59:00	01/17/2017 22:59:00	1	7

What's left to do?

- Shift limit push notifications
- Load shift history in mobile apps
- Store state info when app is closed
- Map names to IDs for shift data
- Backend shift restriction logic
- Create view in web portal to display specific resident's shift history
- Export data to a CSV file

Questions?