By Team AURIEL.
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Team

Dr. Bolong Zeng

Team Auriel

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AS-IS, TO-BE Scenario 1

AS-IS

- Jodi is trying to go to class number 101, but gets to know the class has been moved to 109.
- She knows the route to 101 by default but is facing difficulty to find 109.
- She asks for help but people are busy moving around to get to their own classes.

TO-BE

- Jodi is trying to go to class number 101, but gets to know the class has been moved to 109.
- She knows the route to 101 by default but is facing difficulty to find 109. This case will work even if the wifi.
- She gives the new location to Auriel, and she gets the directions to the classroom instantly.

AS-IS, TO-BE Scenario 2

AS-IS

- Jodi is going to the lecture hall situated in the first floor.
- However, she accidentally trips and falls down.
- She tries to signal for help but nobody is around to help her.

TO-BE

- The Auriel app asks Jodi to give her current location and the destination.
- The app calculates the route from the current location to the destination.
- She accidentally trips and falls down.
- She immediately presses a button linked to the Auriel app and an assistant is there to help her within few minutes.

AS-IS, TO-BE Scenario 3

AS-IS

- Jodi needs help navigating, but her phone battery is low
- Jodi's phone dies after a few mins and she has to ask around for directions.
- She takes a long time to figure out the direction to the class.

TO-BE

- Jodi is making use of the Auriel app. It automatically detects that the battery is low
- She gets the complete route to the destinations and sends a message to the caretaker
- She reaches class on time

Function points

Inputs - 25	Device location, Contact info for caretaker, Voice commands Gestures Button click
Outputs - 10	Voice directions, alerts, vibrations, transcripts(screen-output)
Internal Logical File - 50	Logic that determines path between location A and B
External Interface File - 40	Building Model - building floor plans, beacon locations, id and info, building caretaker info
External Inquiries - 25	Nearest beacon, Set of all beacons on the current path
External Input (40)	Building Model,
External Output 30	Calls User's path tracking data

Function points

Inputs - 35	Device location, Contact info for caretaker, Voice commands, Gestures Button click, **User Authentication**
Outputs - 10	Voice directions, alerts, vibrations, transcripts(screen-output)
Internal Logical File - 75	Logic that determines path between location A and B, **Remediation plan, Authorization monitoring,** **Emergency mode (recovery procedures)**
External Interface File - 50	Building Model - building floor plans, beacon locations, id and info, building caretaker info, **data backup**
External Inquiries - 25	Nearest beacon, Set of all beacons on the current path
External Input (40)	Building Model,
External Output 30	Calls User's path tracking data

Creeping rate - Expected

The requirement definition currently addresses 220 function points and we have about 2 months of time to complete the development of the app.

As the development progresses, due to better understanding, 20 function points are expected to added.

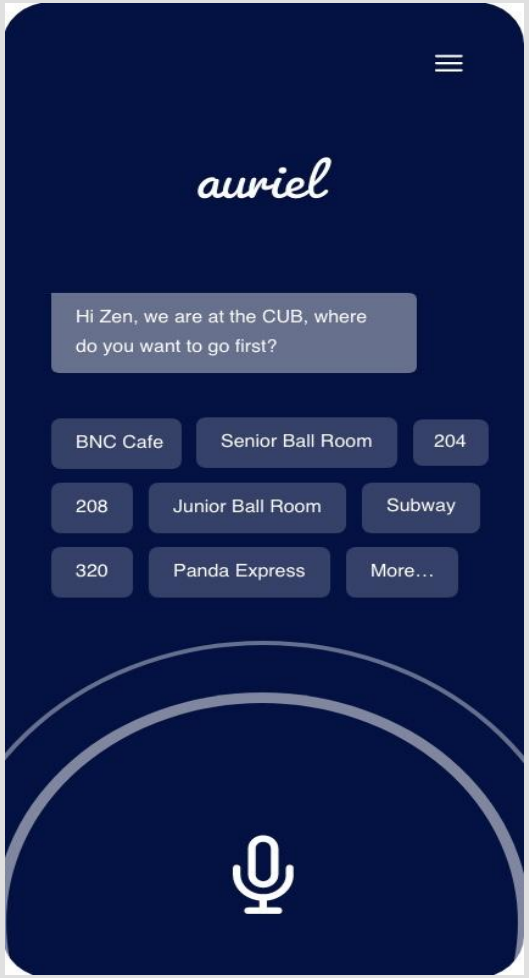
Thus the expected function creep increments at, 10 FPs each month, giving us 8.33% creeping rate for each month.

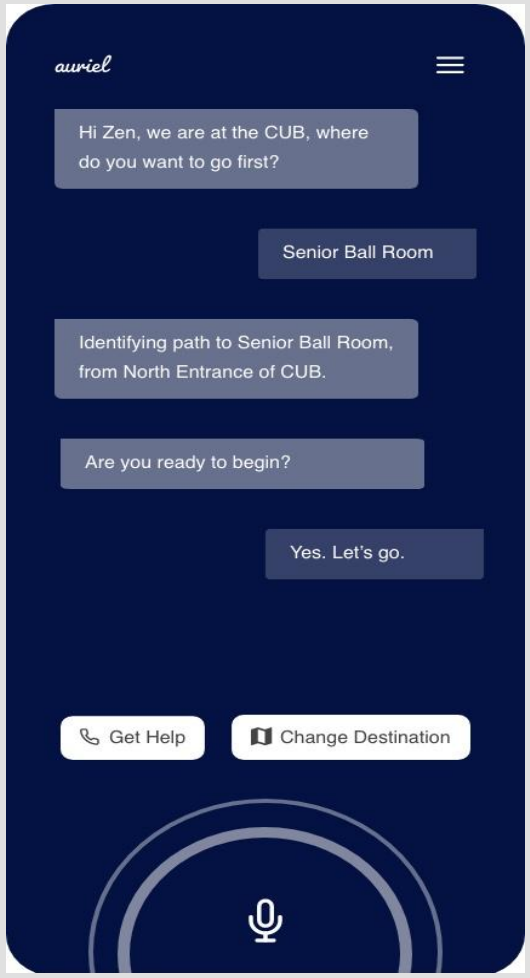
Creeping rate - Actual

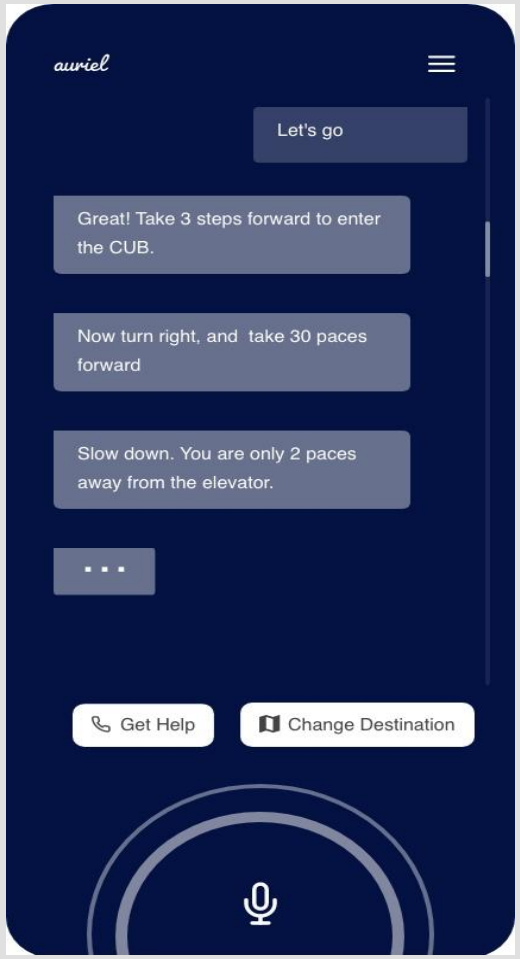
The requirement definition changed to accommodate the HIPAA compliance and there are currently 265 function points. There was an addition of 45 function points.

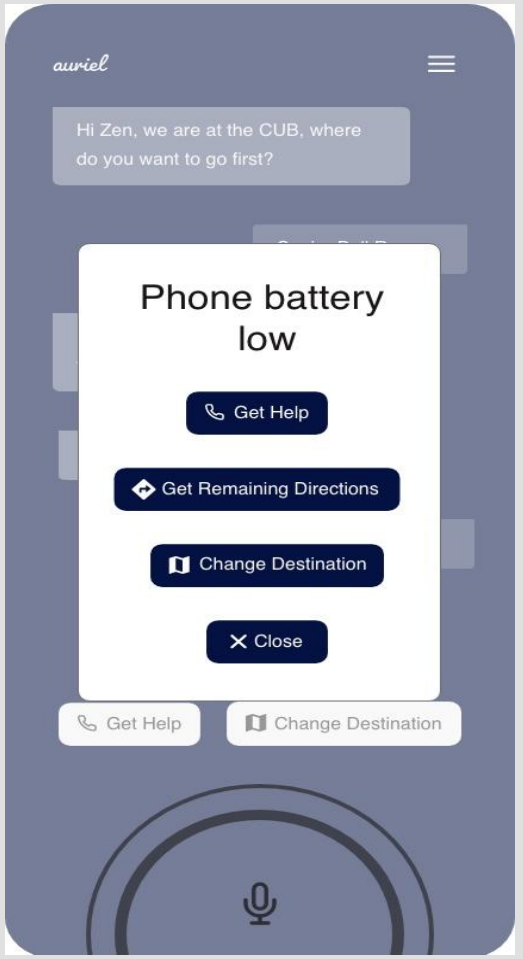
Thus the creeping rate is was at 10.01% for each month of development that remained.

The creeping rate was roughly 2% higher than expected.

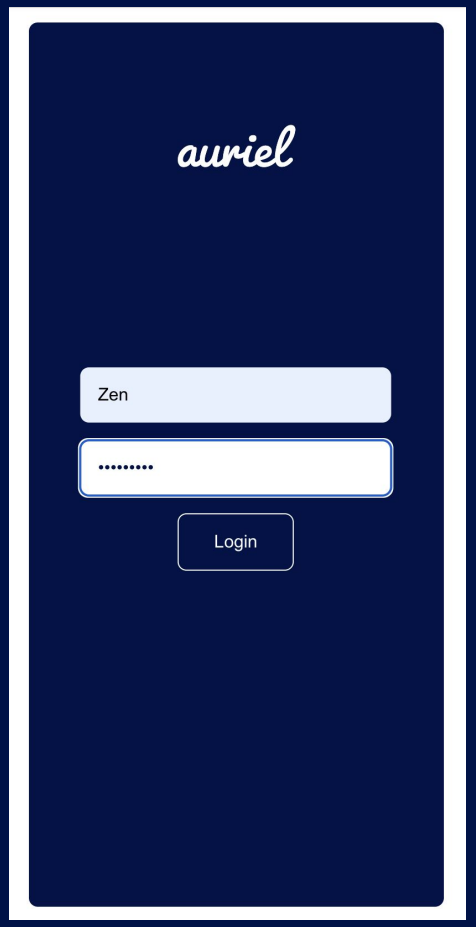

auriel
Hi Zen, we are at the CUB, where do you want to go first?
BNC Cafe
Senior Ball Room
204
208
Junior Ball Room
Subway
320
Panda Express
More…

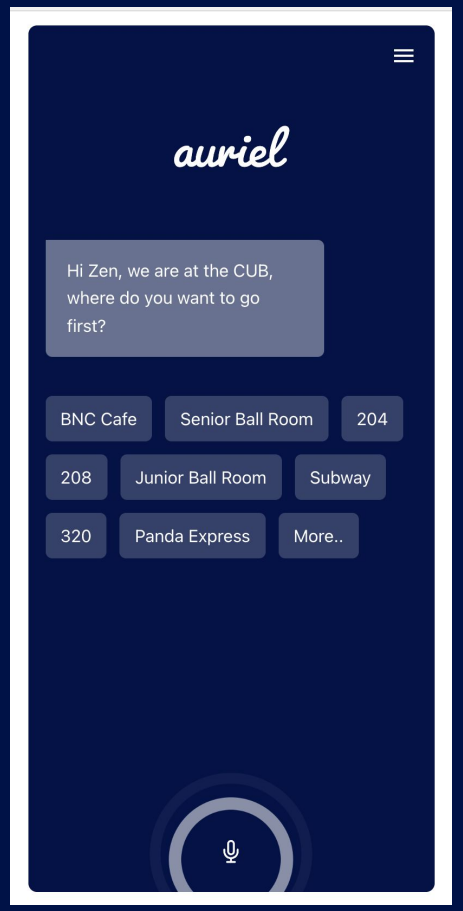

auriel
Hi Zen, we are at the CUB, where do you want to go first?
Senior Ball Room
Identifying path to Senior Ball Room, from North Entrance of CUB.
Are you ready to begin?
Yes. Let's go.
Get Help
Change Destination

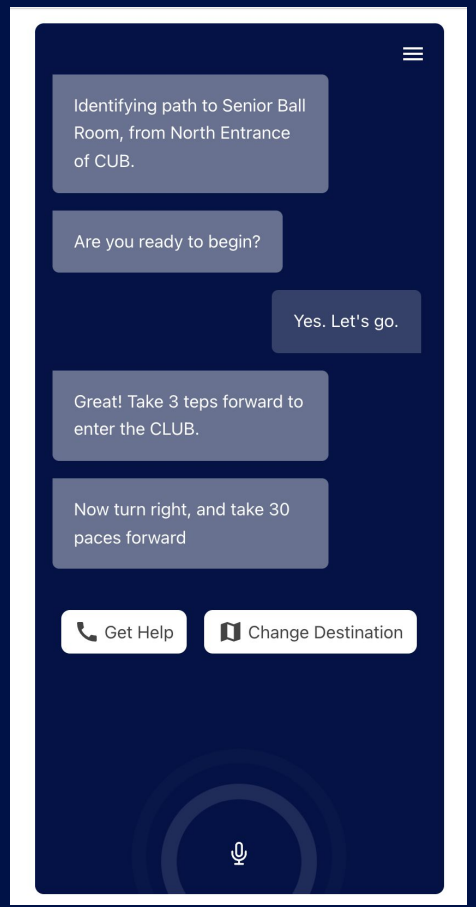

auriel
Let's go
Great! Take 3 steps forward to enter the CUB.
Now turn right, and take 30 paces forward
Slow down. You are only 2 paces away from the elevator.
Get Help
Change Destination

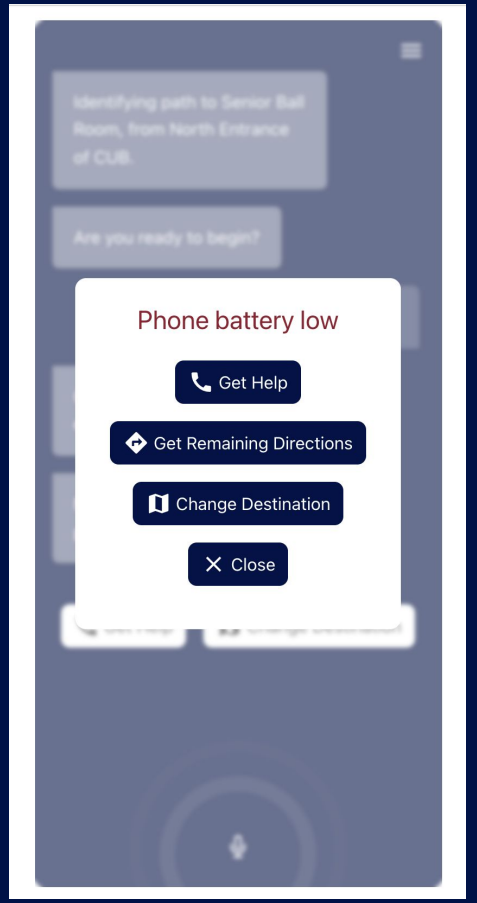

auriel
Hi Zen, we are at the CUB, where do you want to go first?
Phone battery low
Get Help
Get Remaining Directions
Change Destination
Close
Get Help
Change Destination

Application Demo









The application is live at...

https://akshaya-venkatesh8.github.io/Auriel/

THANK YOU!