Cpts 484: Phase I Presentation

Moderamen

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As-Is Scenario One

Situation: Stevie needs to navigate to his next class. He roughly remembers the way but isn't sure. He thinks he needs to walk a few steps straight and then turn left once he reaches the corner (end of the hallway).

Decision: After walking a few steps forward, down the hallway, he thinks he has reached the corner but can't quite tell for sure.

Result: He proceeds to turn left, believing he is at the corner, but unfortunately turns out to be wrong; and hit the wall headfirst. He now is more confused than before and is in pain.

To-Be Scenario One

Situation: Stevie needs to navigate to his next class. He roughly remembers the way but isn't sure. He thinks he needs to walk a few steps straight and then turn left once he reaches the corner (end of the hallway).

Decision: He decides to pull out his phone and use the Moderamen app. He interacts with Moderamen’s VUI and provides his desired destination and waits for the route to load.

Result: The Moderamen app calculates the route from Stevie’s current location to his next class. The app then provides vocal directions such as “walk straight ten steps, then turn left”.

As-Is Scenario Two

Situation: Jane has a doctor's appointment at the County Hospital. She is in the correct building and has been there numerous times; so, she feels comfortable navigating the building. However, she can tell that the building is bustling today, from the noise around her, and feels less comfortable navigating as she usually would.

Decision: Jane decides that she will be fine and will be more cautious the usual as she proceeds to the room where her appointment is.

Result: While walking through the hallways, a little boy, chasing his sister, bumps into Jane, knocking her onto her butt. She is now disoriented and has a bruised tailbone.

To-Be Scenario Two

Situation: Jane has a doctor's appointment at the County Hospital. She is in the correct building and has been there numerous times; so, she feels comfortable navigating the building. However, she can tell that the building is bustling today, from the noise around her, and feels less comfortable navigating as she usually would.

Decision: Jane decides to pull out her phone and use the Moderamen app. Once loaded, she places the phone against her chest; so that, the camera module is facing the area in front of her.

Result: The Moderamen app uses her phone's camera to detect obstacles around her and informs her when she is nearing a possible threat.

As-Is Scenario Three

Situation: John’s retirement community is going on a field trip to the local mall. He wants to visit the food court but doesn’t know how to get there, and neither does his caretaker.

Decision: The caretaker decides to try and use the mall's signs to navigate John to the food court.

Result: Unfortunately, the caretaker takes John on a longer route than needed, by accident. By the time they get to the food court, John is out of breath and needs to sit down to catch his breath and lower his heart rate before he can ordering/eat any food.

To-Be Scenario Three

Situation: John's retirement community is going on a field trip to the local mall. He wants to visit the food court but doesn't know how to get there, and neither does his caretaker.

Decision: John remembers his son installed Moderamen on his phone and ask his caretaker to use the app.

Result: The caretaker takes John's phone and opens the Moderamen app. Once loaded, the caretaker inputs the food court as the desired destination using the App's GUI. The app then displays and voices out the directions, so both John and the caretaker know how to proceed. John and the caretaker arrive at the food court in little time and grab a bite to eat.

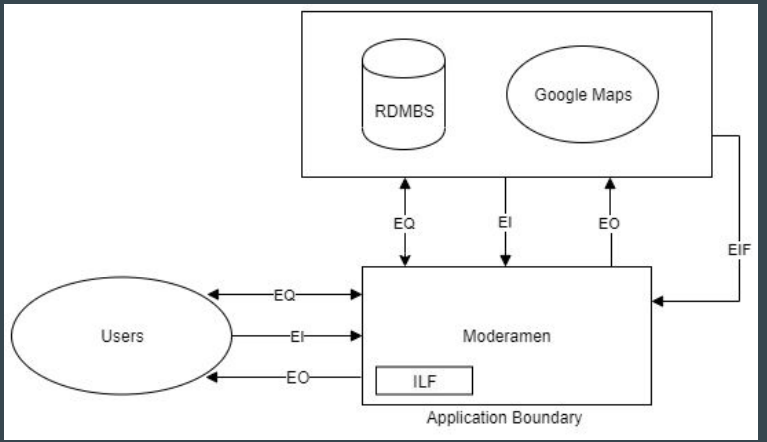
Function Points & Creep Rate

Phase I Final Submission Development Function Point Count (DFP1): 58

Creep Rate (estimated rate we can handle):

(((DFP2 - DFP1) / DFP1) * 100) / 3 months = ((100 - 58) / 58) * 100 = **24.1% per month**

Direct Measure	Count Simple	Count Average	Count Complex	Weighted Measure
External Inputs (EIs)	1	1	1	13
External Outputs (EOs)	0	1	0	5
External Inquiries (EQs)	0	2	0	8
Internal Logical Files (ILFs)	0	1	1	25
External Interface Files (EIFs)	0	3	0	21



Tools (Part 1) - *How Moderamen compares to alternatives*

	Cane	Guide Dog	Moderamen	Cane + Moderamen	Cane + Guide Dog	Guide Dog + Moderamen	Cane + Guide Dog + Moderamen
See	No	Yes	Yes	Yes	Yes	Yes	Yes
Feel	Yes	Yes	No	Yes	Yes	Yes	Yes
Hear	No	Yes	Yes	Yes	Yes	Yes	Yes
Talk	No	Yes (Bark)	Yes	Yes	Yes	Yes	Yes
Think	No	Yes	Yes	Yes	Yes	Yes	Yes
Smell	No	Yes	No	No	Yes	Yes	Yes

Tools (Part 2) - *How Moderamen compares to alternatives*

	Cane	Guide Dog	Moderamen
Ease of Usability	High	Low	Very High
Cost	Low	Very High	Low
Reliability	High	Medium	Medium
Functionality	Low	Very High	High

Conclusion - *Why Moderamen is the best solution in the market*

By functionality:

Cane < Moderamen < [Cane + Moderamen] < Guide Dog < [Cane + Guide Dog] < [Moderamen + Guide Dog] < [Moderamen + Guide dog + Cane]

By functionality alone - guide dogs are the most useful to clients. However, taking into consideration the high cost of $40,598 for a trained guide dog [1], Moderamen would have a much larger client attainability with similar functionality.

[1] https://www.cdc.gov/visionhealth/pdf/dog_guides.pdf