

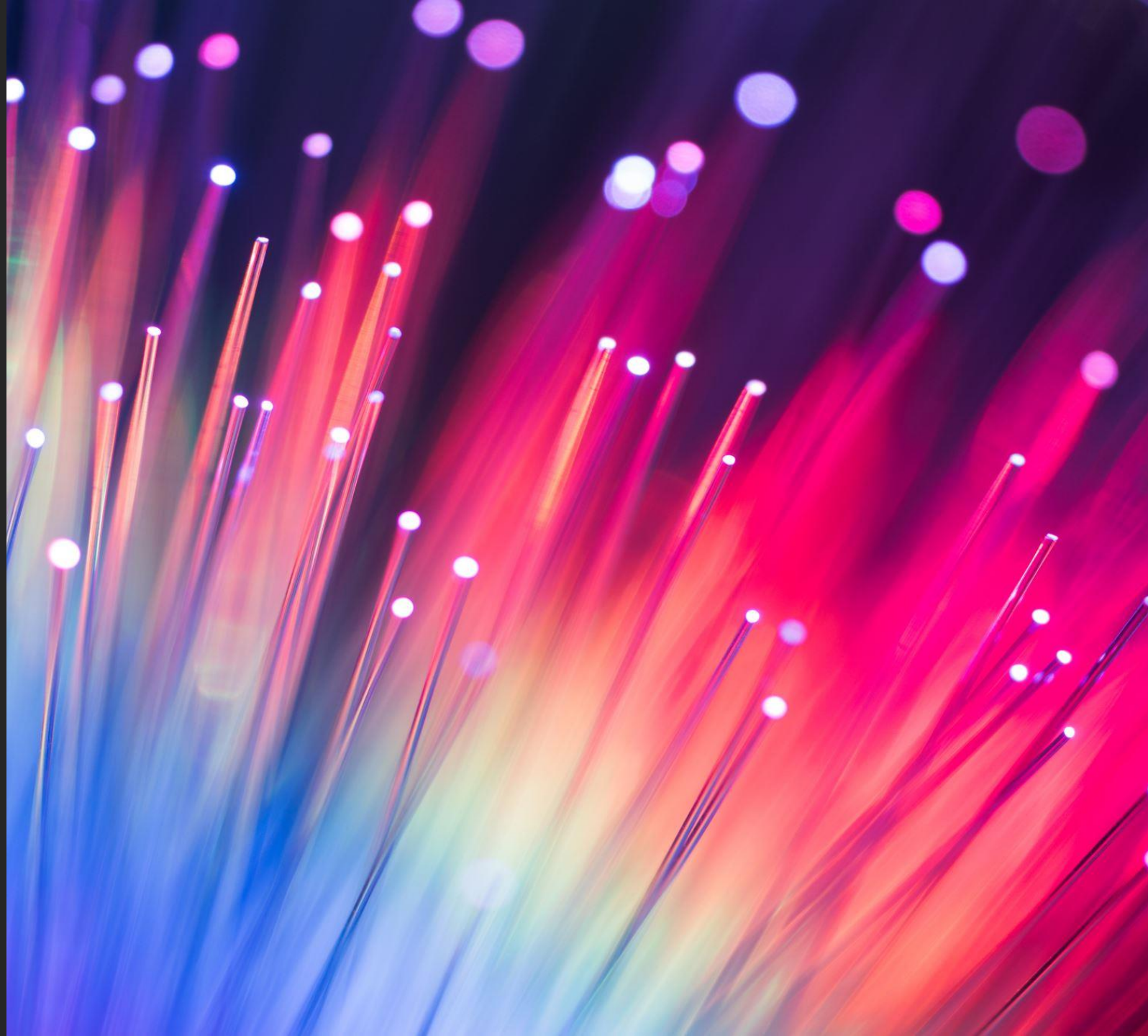
AS-IS TO-BE

PHASE 1 PRESENTATION

SCENARIOS FOR INITIAL
REQUIREMENT UNDERSTANDING

TEAM RSSF

OCT 2019



INSTRUCTIONS

In your team meetings, produce two more AS-IS scenarios, and record what they are in your meeting notes.

These 3 scenarios (including the given one) should be part of your Phase I final presentation. Therefore, they should be either critical or high frequency ones.

You can easily produce more scenarios that your app can help solve of course.

For each of the AS-IS scenario, produce the corresponding TO-BE scenario as well.

Then, pick the top priority TO-BE scenario, and perform further analysis using the types of questions presented in Lesson 6.

AS-IS #1 (GIVEN)

- Stevie is trying to go to his next classroom. He knows he needs to walk ahead a few steps, and then turn left around the corner.
- However, he is not sure when to turn.
- He took a guess, but turned too early, hit the wall and hurt his head.

TO-BE #1 (GIVEN)

- The Blind Buddy app asks Stevie to give his current location and the destination.
- The app calculates the route from the current location to the destination.
- Blind Buddy tells Stevie to “walk ahead 10 steps, then turn left.”

AS-IS #2

- Oscar is currently on the first floor of the building and needs to access the second floor for a meeting.
- He doesn't know where a nearby stairwell is located.
- He can't find it in time and is late for his meeting.

TO-BE #2

- Oscar gives the Blind Buddy app his location and tells the app he wants access the second floor.
- The app finds a nearby stairwell or potentially elevator.
- He makes it to the meeting in time.

AS-IS #3

- Kate is trying to get from one of her lectures to another in the same building on the first day of classes.
- She has a general idea of where the room is but isn't exactly sure.
- She walks down the hall and goes into the room she thinks her next lecture is in only to find out once the class starts that she is in the wrong room.

TO-BE #3

- Kate voices her current room and target room to Blind Buddy.
- The app gives her directions to her next lecture.
- She makes it to the correct room on time.

TOP PRIORITY

- **Primary Task:** Indoor building navigation between rooms
 - Accesses current location
 - Leads to desired location
- Scenario #1 provides the broadest, most fundamental scenario of which the app will attempt to solve. It encompasses this primary task best.

COMPARE

	Cane	Dog	Stevie	App	User + Cane	User + Dog	User+ Cane + App	User + Dog + App	User + App
See		X		X		X	X	X	X
Feel	X	X	X		X	X	X	X	X
Hear		X	X	X	X	X	X	X	X
Talk		To some extent (Bark)	X	X	X	X	X	X	X
Think		X	X	X	X	X	X	X	X
Smell		X	X		X	X	X	X	X

COMPARE

- Blind Buddy is the best navigation tool for a blind person.
- The cane + user still cannot see.
- The dog + user can provide all senses, but dogs are expensive in time and money to maintain and train. The user may even be allergic or dislike dogs.
- The app provides all senses in conjunction with the user at little to no cost to him.
 - Cane may be used supplementary to avoid unpredictable objects such as trash cans and custodial equipment commonly found inside municipal buildings.

SCOPE CREEP

- Because of the difficulty of the semester, our team has almost no room for scope creep.
- Future unseen challenges predicted in building this app may prove very difficult.
 - Team has little experience with mobile development.
 - Possibilities with third-party software such as Google Indoor Maps unknown.
 - General clearness that emerges with the development process will reveal unforeseen challenges.
- We will do our best to keep up with it.

FUNCTION POINTS

FUNCTIONAL REQUIREMENTS

P FR_ID Preliminary FR Description

<i>PFR1</i>	Accepting from the user the destination location to go
<i>PFR2</i>	Figuring out the routes to reach each destination
<i>PFR3</i>	Informing the user of the routes to reach the destination
<i>PFR4</i>	Informing the user to walk a certain distance
<i>PFR5</i>	Informing the user to stop at the right place to turn
<i>PFR6</i>	Detecting obstacles and informing the user how to avoid them
<i>PFR7</i>	Placing emergency calls and messages
<i>PFR8</i>	Detecting when the user falls
<i>PFR9</i>	Predict the user's next actions based on the user's schedule and habits

COMPLEXITY RATE

<i>Functional Requirement Category</i>		<i>Complexity (Rate 0-10)</i>
<i>PFR1</i>	External Inputs	5
<i>PFR2</i>	Internal Logical Files	9
<i>PFR3</i>	External Outputs	3
<i>PFR4</i>	External Outputs	3
<i>PFR5</i>	External Outputs	3
<i>PFR6</i>	External Inquiries	10
<i>PFR7</i>	External Interface files	5
<i>PFR8</i>	External Inputs	10
<i>PFR9</i>	External Inquiries	10

FP COUNT

Type of Component

Complexity of Components

	Low (x3)	Average (x4)	High (x6)
<i>External Inputs</i>	45	60	90
<i>External Outputs</i>	27	36	54
<i>External Inquiries</i>	60	80	120
<i>Internal Logical Files</i>	27	36	54
<i>External Interface files</i>	15	20	30
<i>Total</i>	174	232	348