Capstone Status Report

30.10.2019

Scenario 1A

- The user is driving by a field.
- Recalls some information that is important.
- He is driving.

Scenario 1B

- The user is driving.
- Wants to read **notes** that was previously created.
- He is driving.

Scenario 2

- The user is driving.
- Disconnected from workspace.
- No clue about critical **notification**.
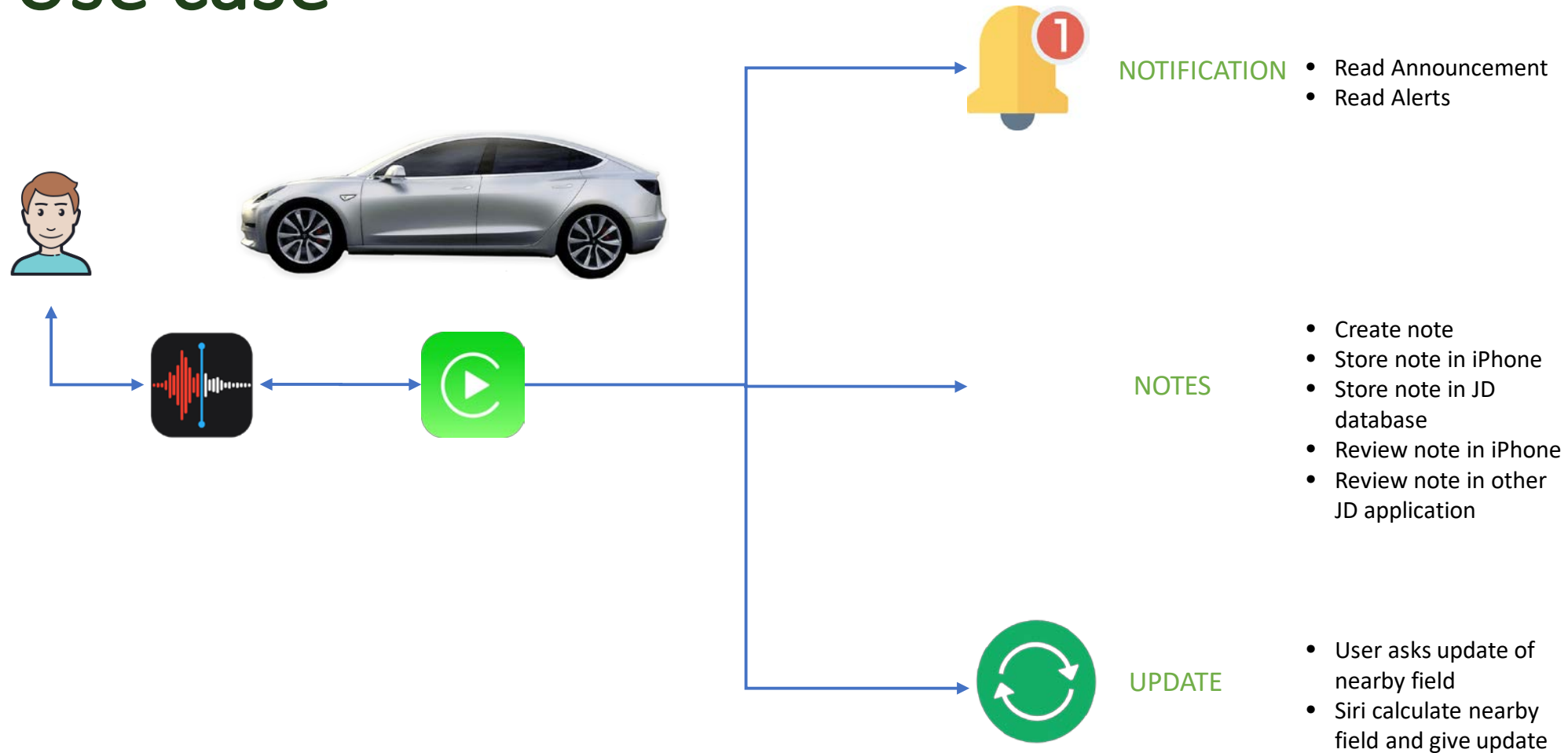
Scenario 3

- The user drives by a field.
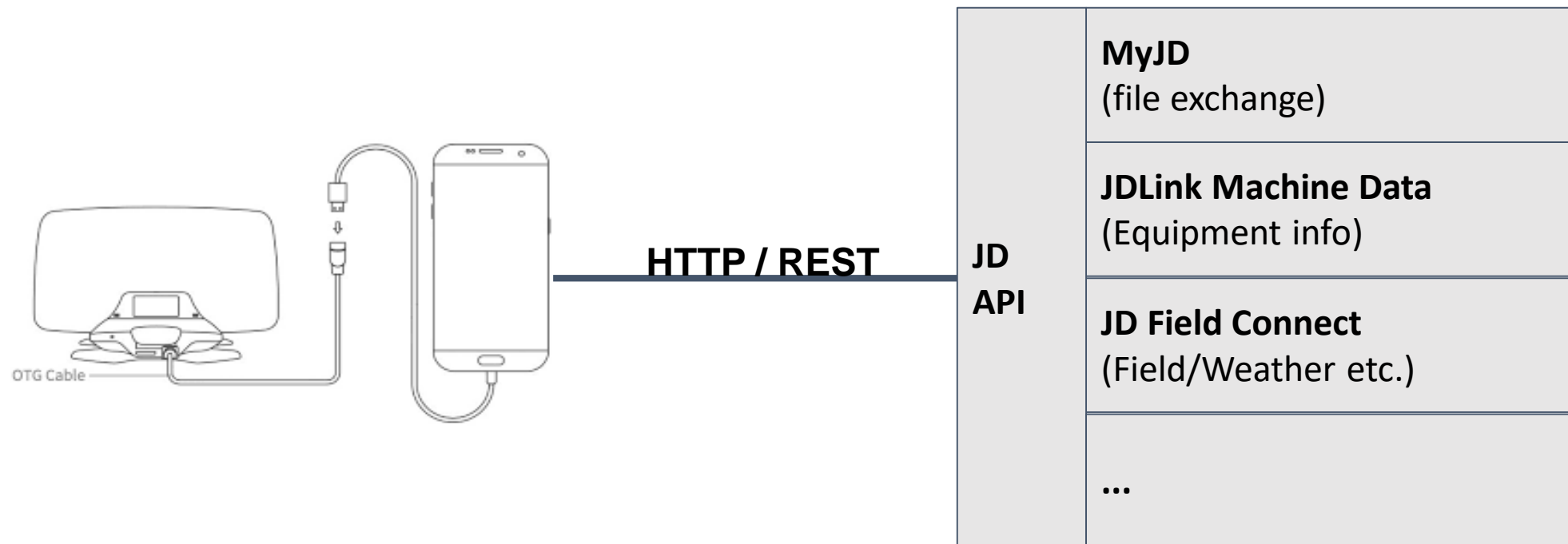- Wishes to get corresponding **update**.

Features

- Notes
  - User can create and hear voice notes through CarPlay.

- Notifications on CarPlay
  - User receives critical notifications.

- Updates on CarPlay
  - User receives important updates regarding the fields <u>in the vicinity</u>

Use case

NOTIFICATION
- Read Announcement
- Read Alerts

NOTES
- Create note
- Store note in iPhone
- Store note in JD database
- Review note in iPhone
- Review note in other JD application

UPDATE
- User asks update of nearby field
- Siri calculate nearby field and give update

Architecture

HTTP / REST

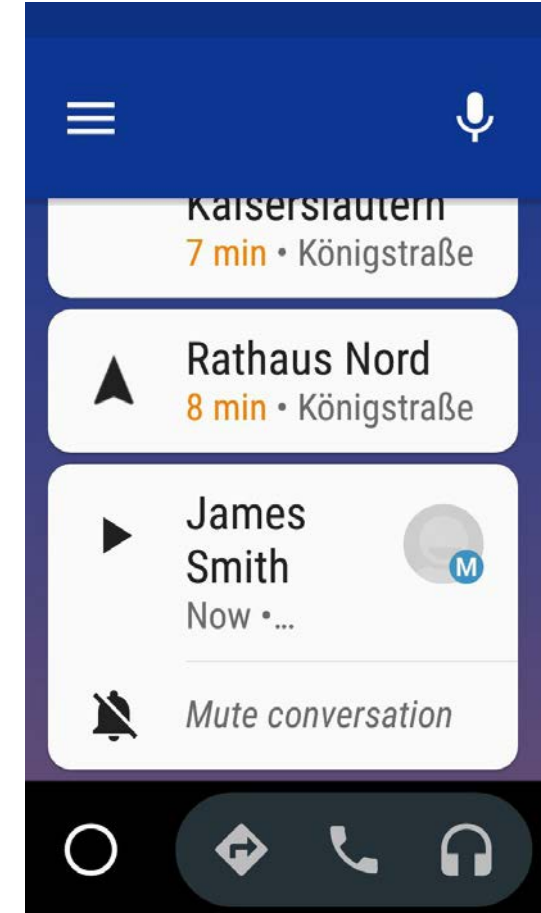| JD API	MyJD (file exchange)
	JDLink Machine Data (Equipment info)
	JD Field Connect (Field/Weather etc.)
	...

MVP

John is driving his car …

- Restricted overview of scheduled operations for today

- Text-To-Speech
  - Notification from Global UI

- Voice Interactions
  - Add a flag on the current position and the corresponding field
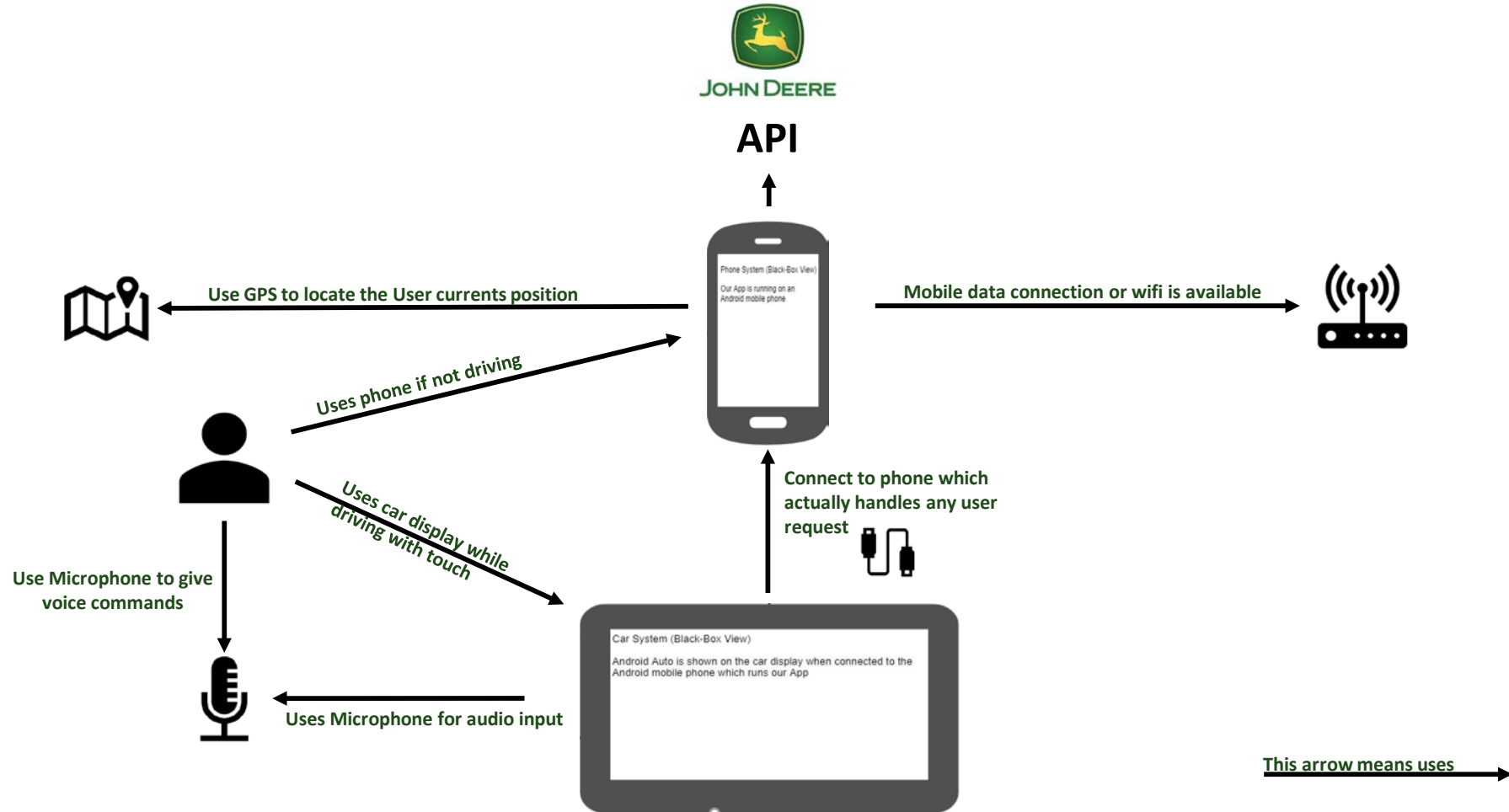
Voice Interaction - Flags

Architecture

Prototypes

- Carplay
  - Mockup screens with Siri developed in Adobe XD.

- Android Auto
  - Mockup screens in Adobe XD
  - App Prototype

Feature prority

1. Receive updates about fields in the vicinity
2. Receive updates about the machines in those fields
3. Receive notifications
4. Receive alerts
5. Create voice notes on CarPlay
6. Voice notes read to the user from CarPlay
7. Manage (edit, delete, read) notes from the iPhone

Status

Recap
- Research Android Cars / Style Guideline
- Build Android Auto Application

Challenges/Problems
- Voice Recognition Template Adaption – "Play me Fields"
- Text-to-Speech Elements
- Voice-Dialog with the System

Limitation
- Text-To-Speech is only available for Notifications

Iterations

09.12.19

16.11.19

25/09	01/10	08/10	15/10	22/10	29/1	5/11	12/11	19/11	26/11	03/12	10/12	20/12

Intro
Kick-Off (20/09)

Iteration 1

RE

Iteration 2

Review

Iteration 3

Review

Requirements Engineering

Architecture / UI / Interaction Design

Quality Assurance

Development

Review

Final

Final Review Supervisors

Final Presentation