

# KILOMETER MANAGEMENT: MOBILE AND DESKTOP APPLICATIONS FOR THE EMPLOYEES OF PASI-JAKELUT OY

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# INSPIRATIONS

- ❖ Based on the problems faced by the Pasi-Jakelut Employees,
- ❖ Office employees (Supervisors) have hard time to manage the kilometre details provided by the advertisement (mainoksia) deliverers

## OBJECTIVES

- ❖ The main idea is to develop a hybrid mobile application for the deliverers and desktop web application for the Supervisors where deliverers can send the kilometer details as well as update basic personal informations.
- ❖ The Supervisor can check kilometer detail send by the deliverers.

## APPLICATION FEATURES

### Supervisors (Office Employee) Interface

- ❖ Supervisor interface
- ❖ Can view kilometre details
- ❖ Can send messages to the deliverer and vice versa.
- ❖ Can add, update, delete deliverers
- ❖ Add new Supervisor
- ❖ Can view the detail information of the deliverer.

### User (Deliverer) interface

- ❖ Registered by the Supervisor
- ❖ Can login from the login information given by Supervisor
- ❖ Can Send the kilometre details
- ❖ Can send message and vice versa
- ❖ Can update profile, change password

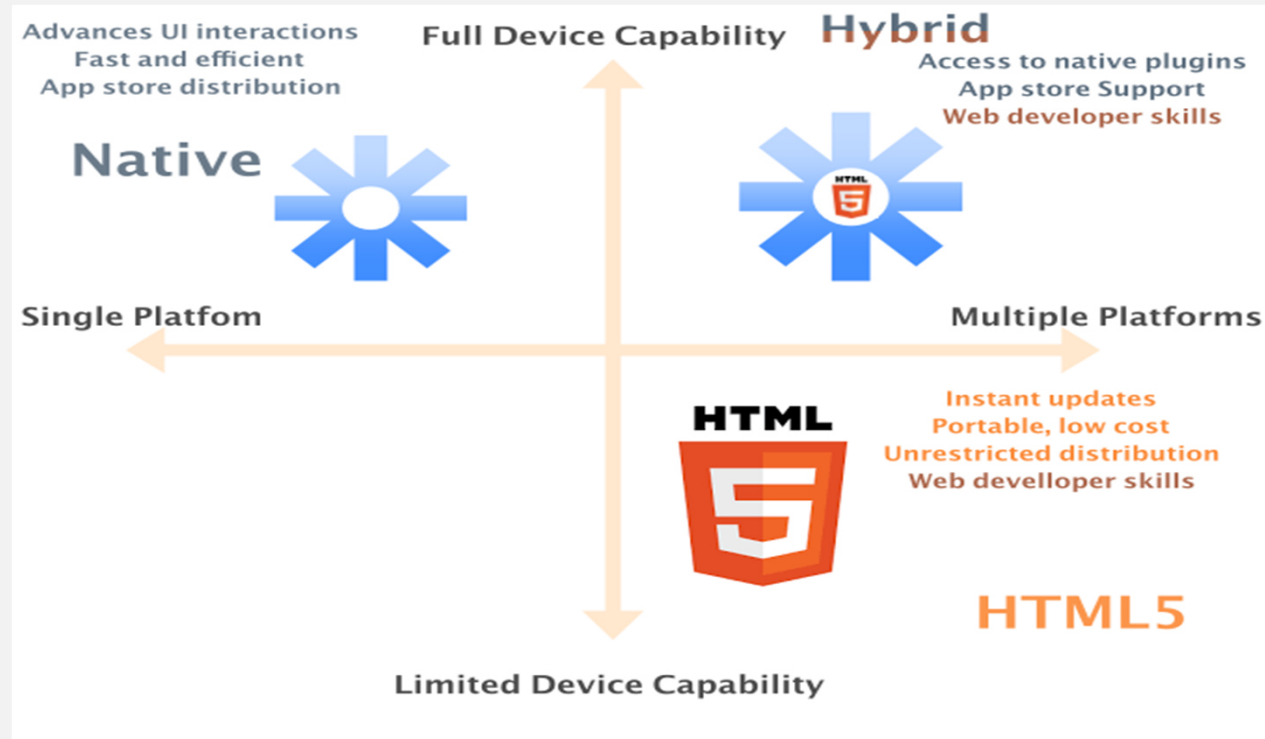
## USED TECHNOLOGIES AND IMPLEMENTATION

- ❖ Visual Studio Code
- ❖ Ionic Framework : Version 2
- ❖ Node.js
- ❖ HTML 5
- ❖ TypeScript
- ❖ PHP
- ❖ MySQL Database
- ❖ JSON
- ❖ PHP Desktop

# MOBILE DEV APPROACH

- ❖ Native Apps
  - iOS, Android, Windows
- ❖ HTML 5 Apps
  - Built using HTML, CSS and JavaScript
- ❖ Hybrid Apps
  - Web apps wrapped in a native container

# MOBILE DEV APPROACH



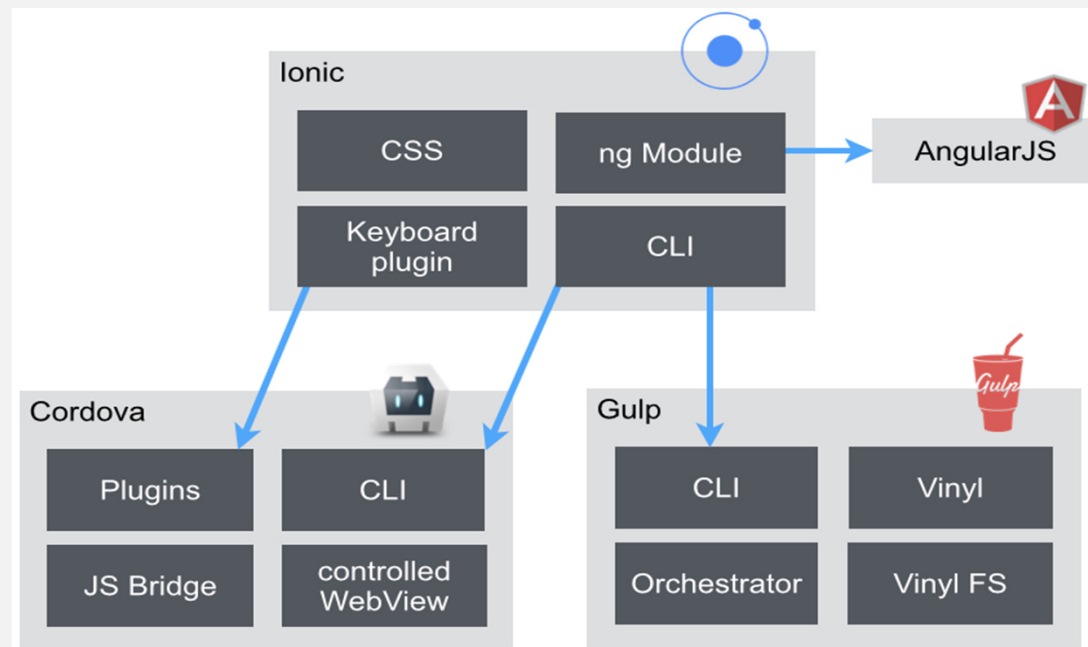
# IONIC FRAMEWORK

- ❖ A user interface framework helps to build hybrid mobile apps with native feels using HTML 5 SDK, Created in 2013 by Drifty Co., Alpha version in November 2013, in March 2015 a 1.0 final version was released and in 2016 and early 2017, several 2.0 were released. Ionic 3 Beta has been released in early April of 2017,
- ❖ Built on top of Angular – gives structure to the application
- ❖ Use JavaScript (ES5) or Typescript along with HTML 5, CSS (SCSS),
- ❖ Apache Cordova as a native wrapper,
- ❖ Supports multiple platforms (Android, iOS, Windows)

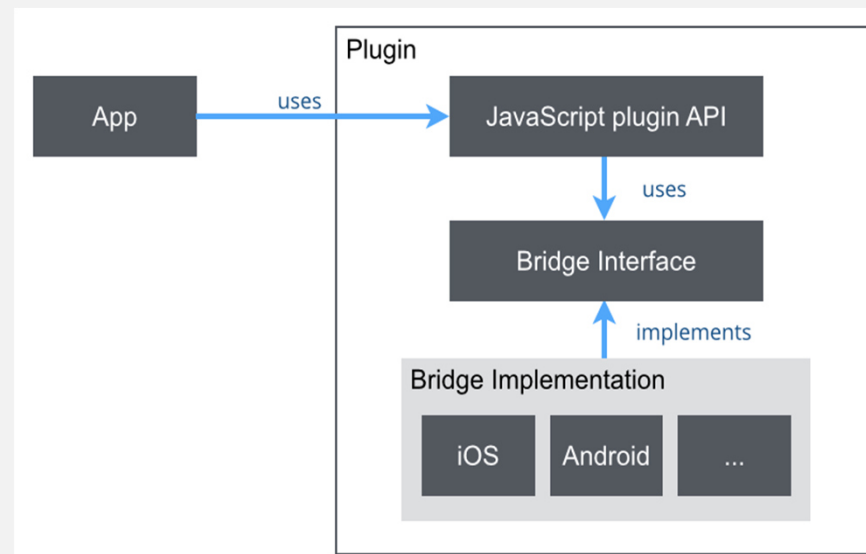
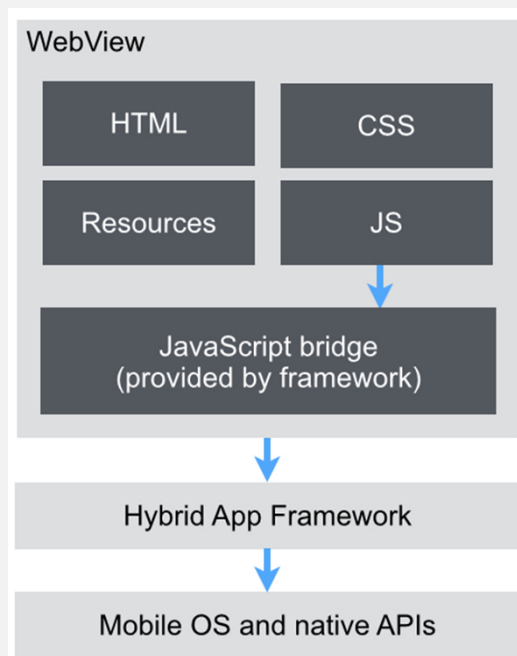




# IONIC ARCHITECTURE



# APACHE CORDOVA ARCHITECTURE



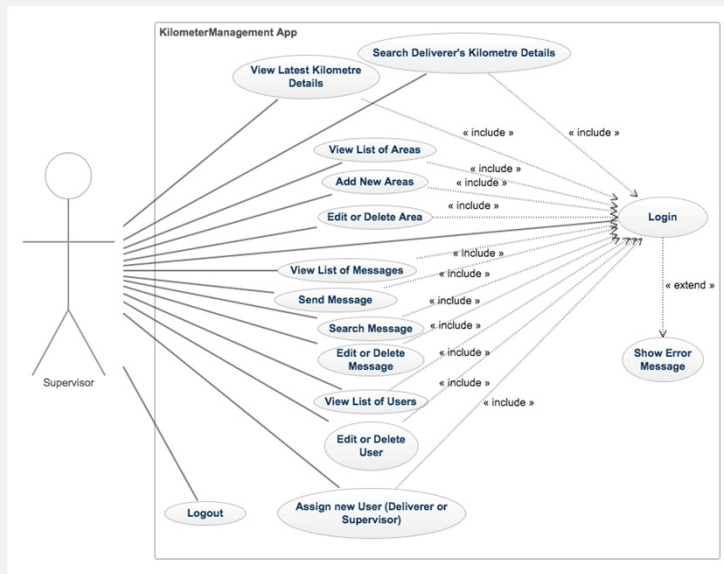
## PHP-MYSQL AND PHP DESKTOP

- ❖ To connect the MySQL database, PHP is used as a server side APIs for the mobile and the PHP Web pages are implemented for the desktop web app.
- ❖ MySQL – database (host: mysql.cc.puv.fi), Web server: [www.cc.puv.fi/~el200655/](http://www.cc.puv.fi/~el200655/)
- ❖ PHP md5 encryption is used.
- ❖ PHP Desktop – open source, created in 2012 by Czarek Tomczak for native desktop GUI purpose using Web technologies like PHP, HTML5, JavaScript..
- ❖ No new API/framework to learn, copy paste existing website “phpdesktop/www/” directory gives you desktop app
- ❖ Inno Setup Installer helps to distribute the app by creating standalone executable setup file.

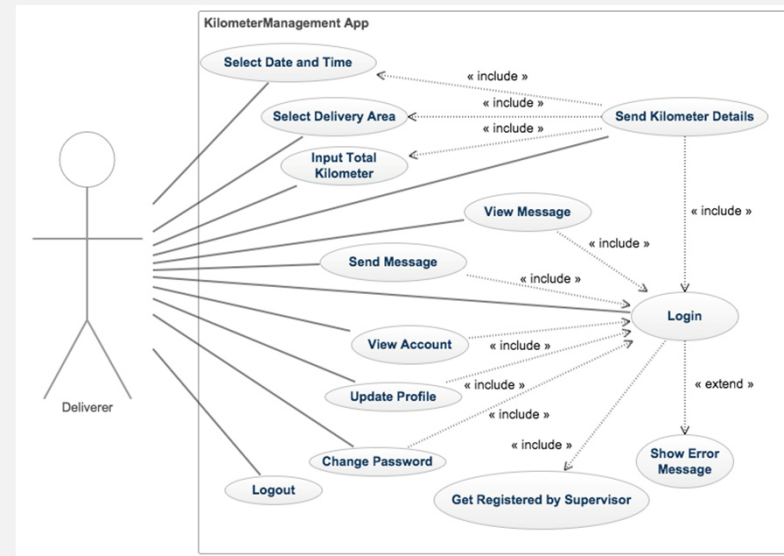
# JSON

- ❖ JSON (JavaScript Object Notation) – to send and retrieve.
- ❖ Simple and easy to parse for the system.
- ❖ To parse JSON object, `responseData` as `JSONObject` is created.

# USE CASE DIAGRAM

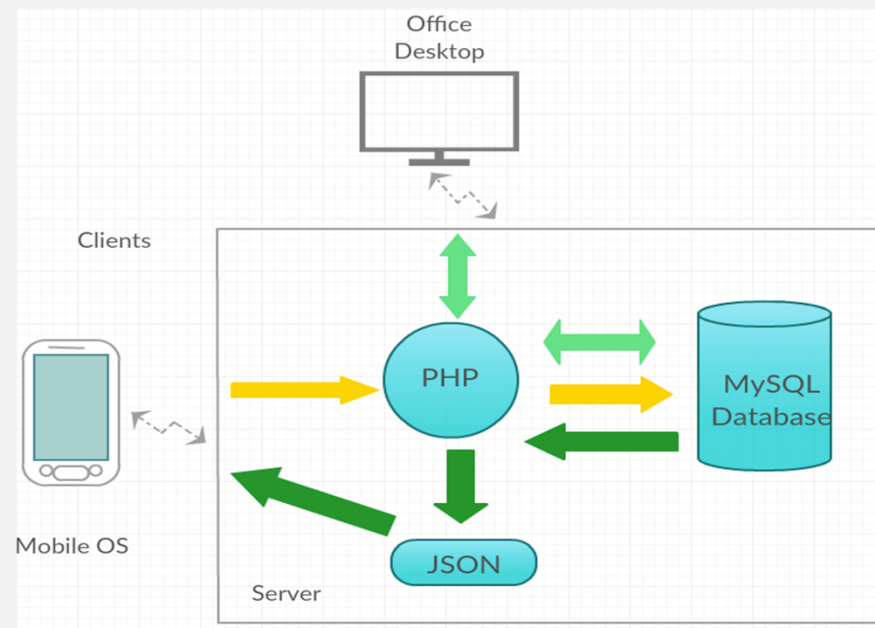


Supervisor's Use Case Diagram

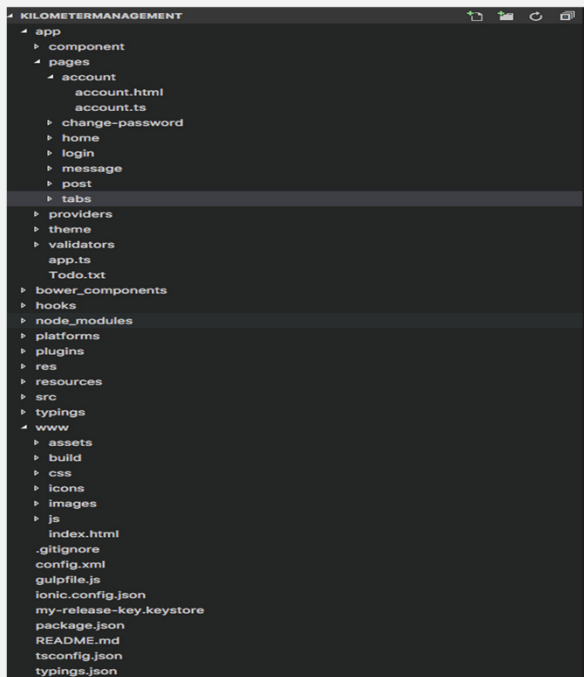


Deliverer's Use Case Diagram

# KILOMETER MANAGEMENT APP – BASIC ARCHITECTURE



# APPS FOLDER STRUCTURES



Ionic 2 mobile app

_layout	1.5.2017 20:02	File folder	
css	2.5.2017 0:39	File folder	
images	1.5.2017 20:02	File folder	
includes	8.5.2017 21:05	File folder	
js	1.5.2017 20:02	File folder	
addlogs.php	9.5.2017 10:13	PHP File	1 KB
addlogs_old.php	9.5.2017 10:12	PHP File	1 KB
e1200655_minoksia	8.5.2017 23:56	Microsoft SQL Ser...	7 KB
index.php	9.5.2017 0:48	PHP File	4 KB
login.php	1.5.2017 20:01	PHP File	3 KB
logout.php	1.5.2017 20:01	PHP File	1 KB
mobile_area.php	2.5.2017 14:11	PHP File	1 KB
mobile_forgotpass.php	9.5.2017 9:06	PHP File	1 KB
mobile_login.php	8.5.2017 23:59	PHP File	1 KB
mobile_messages.php	9.5.2017 9:49	PHP File	1 KB
mobile_messages_old	9.5.2017 9:09	File	1 KB
mobile_messagesread.php	9.5.2017 9:49	PHP File	1 KB
mobile_messagesread_old.php	9.5.2017 9:48	PHP File	1 KB
mobile_post.php	1.5.2017 20:01	PHP File	1 KB
mobile_updateuserinfo.php	1.5.2017 23:20	PHP File	1 KB
mobile_userinfo.php	8.5.2017 22:58	PHP File	1 KB

Web App

# SCREENS SHOTS

HOME MESSAGE ACCOUNT

Sabin Shrestha

Delivery Date:

**May 09, 10:35 AM**

Select your Delivery Area/s:

**Area 1501, 5555**

Total Distance:

**64**

SEND

HOME MESSAGE ACCOUNT

SabinStha  
Hi this is a test!!  
2017-05-09 10:00:00

SabinStha  
fefefe  
2017-04-17 00:00:00

HOME MESSAGE ACCOUNT

Username  
sabin9

Email  
minoksia@yahoo.com

Address  
vaasa

Phone  
+358-449890971

UPDATE PROFILE

CHANGE PASSWORD

LOGOUT



# SCREEN SHOTS

PHP Desktop Chrome

Welcome **SabinStha** ! Logout

## WELCOME

Dashboard

Add Area

Areas List 9

Send Message

Messages List 10

Search Messages 10

Kilometer Details 7

Users List 10

Add User

### Latest Kilometer Updates

ID	Area Number	Distance	Send By	Created(Date)	Search
21	1501	50	sabin9	2017-05-25 08:11:45	Search for more..
20	6601	100	sachin	2017-05-25 08:08:45	Search for more..
19	6600	120	ismo1	2017-05-25 08:07:13	Search for more..
14	1130	123	kiran	2017-05-09 07:26:16	Search for more..
15	1130	123	kiran	2017-05-09 07:26:16	Search for more..
13	1130	90	sabin9	2017-05-09 07:24:24	Search for more..
11	5555	50	sabin9	2017-05-09 07:17:37	Search for more..

PHP Desktop Chrome

Welcome **SabinStha** ! Logout

## WELCOME

Dashboard

Add Area

Areas List 9

Send Message

Messages List 10

Search Messages 10

Kilometer Details 7

Users List 10

Add User

Search Kilometer Details

Search By Name

Start Date

End Date

Submit

Total Distance : 386

ID	Area Number	Distance	Send By	Publish	Created(Date)
11	5555	50	sabin9	0	2017-05-09 07:17:37
13	1130	90	sabin9	0	2017-05-09 07:24:24

DEMO

## REFERENCES

- ✓ <https://github.com/cztomczak/phpdesktop>
- ✓ <https://ionicframework.com/>
- ✓ <http://codingthesmartway.com/ionic-2-project-structure/>
- ✓ <http://www.androidauthority.com/html-5-vs-native-android-app-607214/>
- ✓ <https://blog.codecentric.de/en/2014/11/ionic-angularjs-framework-on-the-rise/>
- ✓ [https://commons.wikimedia.org/wiki/File:HTML5\\_logo\\_and\\_wordmark.svg](https://commons.wikimedia.org/wiki/File:HTML5_logo_and_wordmark.svg)

THANK YOU  
ANY QUESTIONS/SUGGESTIONS??