# Sprint Retrospective Document

Date:  08/04/2020
Project acronym: BikeSharing
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Supervisor:  Cevat ŞENER

## Supervisor's comments

My comment on the progress is positive, I advise to integrate the project while overcoming the deficiencies.

# Sprint summary and new sprint plan

| Unique Item ID | Workpackage ID (from the Kick-off doc) | Description | Group's Comments | Status |
|---|---|---|---|---|
| Completed & Dropped items | | | | |
| 42 | WP7 | Finding closest zone according to user location on back-end side. | closestZone back-end get method which takes user location information and returns the center information of closest zone to user location was developed to call by front-end developers. | Completed. |
| 43 | WP3 | Drawing path from user location to closest zone whose coordinates are taken from back-end side. | The method which was developed on back-end side was called and the path from the user to closest zone coordinate is drawn. | Completed. |
| 44 | WP5 | Implementation of an admin interface that is used to draw a virtual zone on map dashboard interface. | An interface provided in dashboard for admin to draw virtual zones on map. | Completed. |
| 45 | WP7 | Developing a method on back-end side that takes new zone coordinates from dashboard and inserts it on database. | insertZone back-end post method was developed. It takes coordinates, name and address information of the zone from dashboard and after checking intersection with another zone case, it inserts the zone to database as a Turf.js polygon feature. | Completed. |
| 46 | WP7 | Developing back-end needs of user profile page to update user information. | Update user information methods of "Strapi" environment were used to back-end needs of | Completed |

| | | | user profile page. | |
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| 47 | WP7 | Implementation of back-end needs for user reports page. | Reports collection was created on database to record user notifications. It includes notification status and admin comments fields to follow the solution states currently. | Completed. |
| 48 | WP5 | Getting collections from database to display on dashboard. | All collections in our database are integrated to dashboard and displayed as tables. | Completed. |
| 50 | WP5 | Specifying a hardware with Bluetooth connection for developing smart lock. | Components for development of the smart lock are specified and ready for ordering. | Completed. |
| 53 | WP4 | Conversion of the mobile application from expo managed project to natively built project. | Eject command was run, and eject process was successful. Configuration of native environment was finished. | Completed. |
| 54 | WP3 | Integration of user profile and report pages to back-end services. | Users' information which are in AsyncStorage is shown on page, and a PUT request method was implemented to let users to update their information. | Completed. |
| 55 | WP7 | Developing a back-end method which updates virtual zone coordinates. | updatePolygon back-end post method was developed. After calling from dashboard, it changes related polygon coordinates by checking intersection case. | Was not on the initial plan, completed. |
| 56 | WP7 | Keeping all dockers information as virtual zones whose polygon fields are Turf.js geo-json features. | Dockers collection was changed as zones collection and all virtual zones were updated as Turf.js polygons. Database plugins of collections that are in a relation with zones | Was not on the initial plan, completed. |

| | | | collection were updated according to this change. | |
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| 57 | WP7 | Transfering dockers.js back-end code implementation to zones.js. | All methods in dockers.js were updated and transferred. Related back-end methods which queries to zones collection were developed. | Was not on the initial plan, completed. |
| 15 | WP5 | Uploading data to the cloud system for data analyzing. | Since it is not the appropriate way for data analyzing, the item dropped. | Dropped. |
| 19 | WP4 | Addition of required notification to the mobile application according to user usage data. | It is seen unnecessary feature to include in app and cancelled. | Dropped. |
| 20 | WP5 | Application store payment methods will be integrated to the mobile app. | This is the last task to complete because the project is not commercial product yet. Also, it will restrict our development. | Dropped. |
| 49 | WP5 | Creating and updating the data on database from dashboard. | In consequence of meeting with our supervisor, we decided not to include data manipulation in dashboard directly. | Dropped. |
| Continuing items | | | | |
| 31 | WP5 | Setting the permissions of accessing database from security perspective. | It will be developed after consideration of user restrictions. | Not started. |
| 51 | WP4 | Integration of smart lock hardware with the mobile application. | This item depends on implementation of the smart lock. | Not started. |
| 52 | WP5 | Calculation and demonstration of data statistics on dashboard. | It will be implemented in the following weeks. | Not started. |

| 58 | WP4 | Converting Expo modules to native modules. | As we decided in this sprint, expo was ejected from the project. Some of expo modules are converted, but still we have some issues on it. Therefore, Expo-modules will be continued to convert to native modules. | Was not on the initial plan-in progress |
|---|---|---|---|---|
| 59 | WP4 | Uploading images from mobile application to the server. | The report page has image picker to take or pick a photo. This image will be uploaded to server or sent via email. The chosen transfer method will be implemented. | Was not on the initial plan-in progress |
| New items | | | | |
| 60 | WP7 | Creation of Admin role for bike sharing user and making permissions of admin users for dashboard usage. | | New |
| 61 | WP5 | Integration of dashboard login page with login back-end code implementation. | | New |
| 62 | WP7 | Developing back-end methods and services to update user roles. | | New |
| 63 | WP5 | Correction on map page of dashboard and update on zones will be done, they will be resent to back-end side. | | New |
| 64 | WP5 | Users collection will be added to the dashboard. | | New |
| 65 | WP5 | Admin assignment feature will be added to the user page of dashboard. | | New |

| 66 | WP6 | New MongoDB database will be created for data analysis part of the dashboard. | | New |
|----|-----|------------------------------------------------------------------------------|---|-----|
| 67 | WP6 | Fake data will be generated and loaded to the newly created database. | | New |
| 68 | WP5 | Data analysis page will be implemented on dashboard. | | New |
| 69 | WP8 | Testing of methods and pages to provide smooth application. If there will be got some error on front-end, they will be fixed. | | New |
| 70 | WP3 | JWT Token implementation in headers in requests. | | New |
| 71 | WP3 | Re-designing necessary pages in order to provide easy usage. | | New |
| 72 | WP5 | Creating a project web page that introduces the BikeSharing system. | | New |

# Overall progress

| | Sprint 1 | Sprint 2 | Sprint 3 | Sprint 4 | Sprint 5 | Sprint 6 | Sprint 7 | Sprint 8 | Sprint 9 |
|---|---|---|---|---|---|---|---|---|---|
| MF1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| MF2 | 10 | 25 | 50 | 60 | 70 | 80 | 85 | | |
| MF3 | 25 | 25 | 25 | 35 | 45 | 50 | 55 | | |
| MF4 | 0 | 50 | 60 | 65 | 70 | 75 | 80 | | |
| MF5 | 0 | 50 | 60 | 65 | 70 | 75 | 80 | | |
| MF6 | 0 | 0 | 0 | 0 | 0 | 10 | 25 | | |
| MF7 | 0 | 0 | 0 | 25 | 25 | 30 | 35 | | |
| MF8 | 0 | 50 | 60 | 65 | 70 | 75 | 80 | | |
| MF9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| MF10 | 0 | 0 | 25 | 35 | 45 | 50 | 55 | | |
| MF11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| MF12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| MF13 | 0 | 0 | 0 | 0 | 0 | 25 | 40 | | |
| MF14 | 0 | 0 | 10 | 15 | 30 | 40 | 50 | | |
| MF15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |