IAB330 - Mobile App Development

Assignment 2: Project management
(10 marks)

Due Date: Monday, September 10, 11:59 pm

Submission Coversheet Declaration

You must sign below. By signing this form you agree to the following:

- We declare that all of the work submitted for this assignment is our own original work except for material that is explicitly referenced and for which we have permission, or which is freely available (and also referenced).

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The assignment should be completed in a team of 4 students. Please consult with your tutor and unit coordinator if you have any issues.

Chosen Project Name:		
Team Member Details		
Student Number	**Student Name**	**Signature**
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Executive summary of MVP

What FoodRadar holds above other similar applications is ratings for individual items on a restaurants menu. FoodRadar will enable the user to search for a specific dish and give them a list of results with the best matching dishes available, based on ratings, price, location and cousine. The user will have to be able to log in to FoodRadar to leave a review. These features are necessary for the MVP, for FoodRadar to be viable and unique compared to today's vast options of restaurant rating applications. Other features discussed in Assignment 1 will be implemented if time allows.

Feature list

Features intended for this version

Feature	Priority rank
Show individual dish rating	Must Have
Dish rating input	Must Have
Search by dish	Must Have
Restaurant average grade	Must Have
Filter: Cuisine	Must Have
Filter: Price	Must Have
Filter: Quality	Must Have
Filter: Distance	Must Have
User login	Must Have
Map: Pins of restaurant	Should Have
Map: User location service	Should Have

Features intended for future

Business account	Should Have
Meal type rank	Should Have
Login w. social media	Could Have
Share meal/restaurant on SocialMedia	Could Have
Filter: Dietary restrictions	Could Have
Filter: Meals (Breakfast, lunch, dinner)	Could Have
Filter: Establishment type	Could Have
Food taste profile	Could Have
Ads	Could Have

User Stories

StoryID: 1	**Search for cuisine**	Story Points: 8
As an Italian I want to find good spaghetti carbonara so I can feel at home.		
Acceptance Criteria: - Navigation possibility to get to the advanced search - Dropdown menu to search for cuisines - Dropdown menu to search for dishes in this cuisine - Submit button		

StoryID: 2	**Filter for price**	Story Point: 2

As a student I want to filter the nearby restaurant by price so I can find a good and cheap place.

Acceptance Criteria:
- Navigation possibility to get to the advanced search
- Slider to switch between several price categories
- Submit button

StoryID: 3	**Filter for distance**	Story Points: 2

As a traveller I want to find a nearby restaurant that serves good food so I can experience local culture.

Acceptance Criteria:
- Navigation possibility to get to the advanced search
- Slider to filter for distance
- Submit button

StoryID: 4	**Filter for quality**	Story Points: 2

As a person with specific taste I want to see the rating of a restaurant before visiting it so I will not be disappointed when I get there.

Acceptance Criteria:
- Navigation possibility to get to the advanced search
- Slider to filter for quality
- Submit button

StoryID: 5	**Result Page**	Story Points: 8

As a restaurant customer I want to compare the restaurants which fits my needs so I can choose the best one.

Acceptance Criteria:
- Advanced Search or Map to get to a result page
- List of all restaurants which meet the criteria
- General Information of the restaurants:
    - name, cuisine, quality, distance, price

StoryID: 6	**View dish rating**	Story Points: 8

As a restaurant customer I want to find the best dish on the menu so I can get the best experience at this place.

Acceptance Criteria:
- Navigate with advanced search or map to restaurant
- View detailed information on restaurant as:
    - location
    - atmosphere
- View menu with ranking for each dish
- (View pictures of restaurant and dishes)

StoryID: 7	**Map searching**	Story Points: 8

As a hungry person I want to find restaurants nearby so I can get quickly food.

Acceptance Criteria:
- View a map with pins which show restaurants
- Zoom in or out
- Click pins and get a preview of the restaurants

StoryID: 8	**Dish rating**	Story Points: 4

As a restaurant visitor I want to rate the dish I ate so following customers know what to eat.

Acceptance Criteria:
- Navigate to restaurant details
- Search menu for dish
- Rate dish and restaurant
    - general rating and free field text and pictures

StoryID: 9	**User Login**	Story Points: 4

As a user I want to have my own profile to rate dishes and restaurants.

Acceptance Criteria:
- Sign up for an account
- Navigate to login/get redirected to login when giving rating if logged out.
- Input email and password.
- Redirect to home screen or previous activity.

Release 1

Delivery date: 28.10.18   Total Story Points: 40

This release implements the main features of FoodRadar. It allows the user to search for nearby restaurants which fits his taste, find the best dish in a specific restaurant and rate individual dishes.

Advanced search

Allows the user to perform an advanced search with several filters.

Story ID	Story Title	Story Points
1	Search for cuisine	8
2	Filter for price	2
3	Filter for distance	2
4	Filter for quality	2
	Story Point Sub-Total:	12

View results and details for restaurants

Implements the result page with a detailed page of every restaurant.

Story ID	Story Title	Story Points
5	Result Page	8
6	View dish rating	8
	Story Point Sub-Total:	16

Map searching and dish rating

Implements a map which enable a easier search and allows the user to rate places and dishes.

Story ID	Story Title	Story Points
7	Map searching	8
9	User Login	4
8	Dish rating	4
	Story Point Sub-Total:	16

Sprint Plan

Sprint 1

Delivery date: 23.09.18   Total Hours: 21

Story 1: Search for cuisine

Task ID	Task Description	Estimate	Taken
T01	Design general app with bottom navigation bar	5	
T02	Design advanced search bar tab with dummy cuisine filter	2	
T03	Add dummy dish filter and submit button	1	
T04	Connect dummy buttons to backend	3	
	Total Hours:	10	

Story 2: Filter for price

Task ID	Task Description	Estimate	Taken
T05	Add dummy filter for price	1	
T06	Connect dummy button to backend	2	
	Total Hours:	3	

Story 3: Filter for distance

Task ID	Task Description	Estimate	Taken
T07	Add dummy filter for distance	1	
T08	Connect dummy button to backend	2	
	Total Hours:	3	

Story 4: Filter for distance

Task ID	Task Description	Estimate	Taken
T09	Add dummy filter for distance	1	
T10	Connect dummy button to backend	2	

		Total Hours:	3	

Sprint 2

Delivery date: 07.10.18   Total Hours: 20

Story 5: Result Page

Task ID	Task Description	Estimate	Taken
T11	Design result page with dummy results	5	
T12	Get results for all possible filters	5	
	Total Hours:	10	

Story 6: View dish rating

Task ID	Task Description	Estimate	Taken
T13	Design restaurant detail page with general informations about restaurant	4	
T14	Design page with menu of restaurant	3	
T15	View all ratings to a specific dish	3	
	Total Hours:	10	

Sprint 3

Delivery date: 21.10.18   Total Hours: 27

Story 7: Map searching

Task ID	Task Description	Estimate	Taken
T16	Design map tab with Google Maps	3	
T17	Show restaurant as pins on map	6	
T18	Show restaurant preview when clicking pin	4	
	Total Hours:	13	

Story 9: User Login

Task ID	Task Description	Estimate	Taken
T19	Design login page	2	
T20	Connect Login to backend	2	
T21	Guarantee secure authentication	3	
	Total Hours:	7	

Story 8: Dish rating

Task ID	Task Description	Estimate	Taken
T22	Create rating form which is accessible from the restaurant detail page	5	
T23	Connect rating from to backend	2	
	Total Hours:	7	

Project Timeline

	September																					October																														
	10 11 12 13 14 15 16 17 18 19 20 21 22 23						24 25 26 27 28 29 30							1 2 3 4 5 6 7							8 9 10 11 12 13 14							15 16 17 18 19 20 21							22 23 24 25 26 27 28							29 30	
PROJECT WEEK	1		2		3		4		5		6		7			
Release 1	Sprint 1															
			Sprint 2													
					Sprint 3									PROJECT END		
													Spare Time			
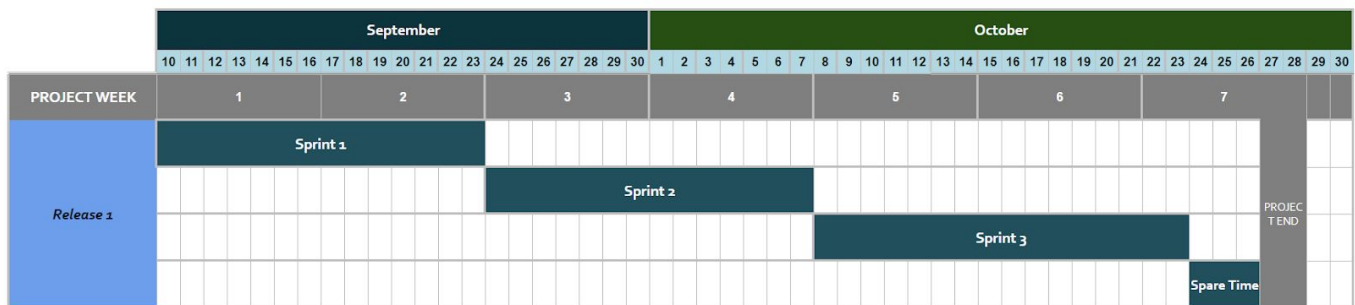
Development/Support Tools

Git

The team is using Git as a source code repository. Every team member is working in his own branch to finish his feature he is working on. Afterwards he is merging his work to the master branch.

Trello

The team is using Trello as a project management tool. It easily shows all open tasks. Additionally it helps to assign tasks and comment problems to specific tasks and also discuss solutions.

Visual Studio 2017

The team is using Visual Studio to code the Xamarin based Application. Visual Studio provides nearly all the features developer need to develop cross-platform applications.

Amazon Web Services

FoodRadar will use the Amazon Web Services for all cloud-based functionalities. We choose this service, because it is the largest and cheapest provider for start-up Web-Services.

Security and privacy requirements

Our application does not deal with a lot of private information. The most sensitive data is the user's current location, dining plans, authentication data and profile. Passwords will be properly salted and hashed according to best practices. Communication between devices and our servers will need to be encrypted with a combination of symmetric and asymmetric encryption algorithms and standards. When it comes to database security, all user input queries have to be properly sanitized and stripped of potentially dangerous strings to prevent injection attacks. Even though most data in our database is not sensitive information the entire database will have access control to make sure our network traffic is only servicing our own customers.

Testing and Quality Assurance Strategy

With thorough unit test coverage, Travis continuous integration and modular class-based structure we will strive for good product quality, server uptime and minimal bugs. Through the development process we will do a suite of user acceptance tests to make sure the design will meet users needs.