

Today's exam 12-9-2022

Q1- What is SOAP Web services and the related technologies explain them. (20 Min)

Q2- What is Agile vs Standard Software development methods.

Discuss what is Scrum and all the related Elements of Scrum. (20 Min)

Q3- Function Points and COCOMO ,COCOMOII. (20 Min)

Q4- Scenario of Renting Car application (enjoy) (60 Min)

- \* Discuss about the main elements and present the User Story.

- \*Make an architecture diagram with all the possible elements

- \*Make Sprint for the 6 months duration.

Q2

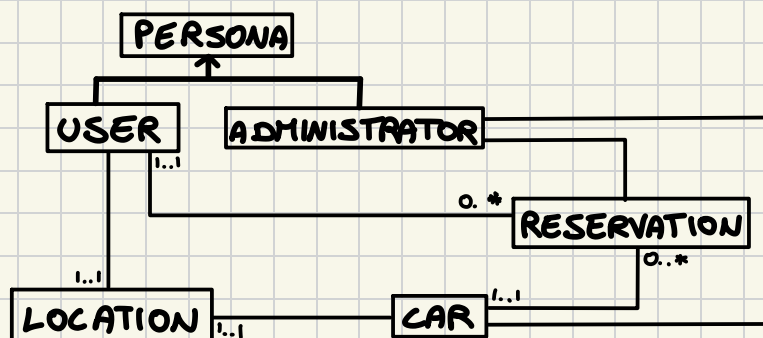
STANDARD METHODS FOLLOW A RIGID AND SEQUENTIAL APPROACH TO SW DEVELOPMENT. A CLASSIC EXAMPLE IS THE WATERFALL MODEL. EACH PHASE MUST BE COMPLETED BEFORE MOVING ON TO THE NEXT. THE FINAL PRODUCT IS DELIVERED ONLY AT THE END OF THE PROJECT.

AGILE IS AN ITERATIVE, INCREMENTAL APPROACH TO SW DEVELOPMENT THAT EMPHASIZES FLEXIBILITY, COLLABORATION AND CONTINUOUS DELIVERY. SW IS DEVELOPED IN SMALL CYCLES CALLED SPRINTS AND THE PRODUCT IS FREQUENTLY RELEASED IN WORKING INCREMENTAL VERSIONS.

Q3

### MAIN ELEMENTS:

- ADMIN FOR THE SYSTEM MANAGEMENT
- USER WHO WOULD RENT A CAR
- RESERVATION OF A CAR BY A USER
- RENTED CAR
- CAR'S LOCATION



### USER STORIES:

AS A USER  
I WANT TO CREATE AN ACCOUNT  
TO USE THE APP

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AS A USER  
I WANT TO VIEW AVAILABLES CARS AROUND ME  
TO RENT THE NEAREST CAR

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AS A USER  
I WANT TO RENT A CAR  
TO USE IT

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AS A USER  
I WANT TO UPLOAD MY CREDIT CARD  
TO PAY

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AS AN ADMIN  
I WANT TO CHECK CAR'S CONDITION  
TO REPLACE IT IF BROKEN

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AS AN ADMIN  
I WANT TO MAKE SURE OF RESERVATION  
TO ACCEPT IT

AS AN ADMIN  
I WANT TO MANAGE USERS  
TO CHECK THEIR BEHAVIOR

6 MONTH OF 4 WEEKS SPRINTS → 6 SPRINTS

SPRINT	MAIN OBJECTIVE	DEVELOPED FEATURES
1	ACCESS AND DATA MANAGEMENT	REGISTRATION, OAUTH, DB DESIGN, FIRST UI DESIGN.
2	ADDING ADMINISTRATIVE FEATURES	ADMINISTRATIVE MANAGEMENT OF USERS, CARS AND RESERVATION
3	VIEWING AND RENTING A CAR	CARS RESERVATION, MAP DESIGN, UI IMPROVEMENTS.
4	IMPLEMENTATIONS OF TRANSACTIONS	CREDIT CARD LOADING AND OTHER PAYMENT METHODS. FIRST POSSIBLE RELEASE
5	TESTING AND OPTIMIZATION	FUNCTIONAL TESTING AND BUG FIXES.
6	DELIVERY	FINAL IMPROVEMENTS AND COMPLETE RELEASE