



Power Enjoy

Software Engineering Project
Oral Discussion





- Project Initiatives
- Implementation Diagrams
- Integration
- Testing
- Project Management



Requirements



- Possibility of cancelling a reservation
 - 1€ fee
 - Unable to book a car within the next 2 hours
- Time limitation for not picking a booked car
 - 1€ fee
 - Unable to book within the next 3 hours



Assumptions



A driver who unlocks a car will ignite the engine

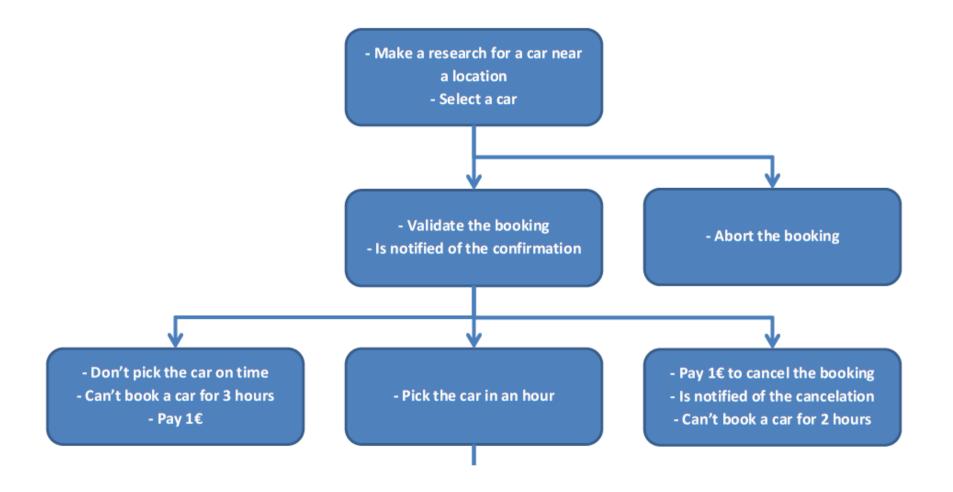
 You can only use the smartphone application to access the system

The society has a maintenance and insurance service for cars



Scenario Example

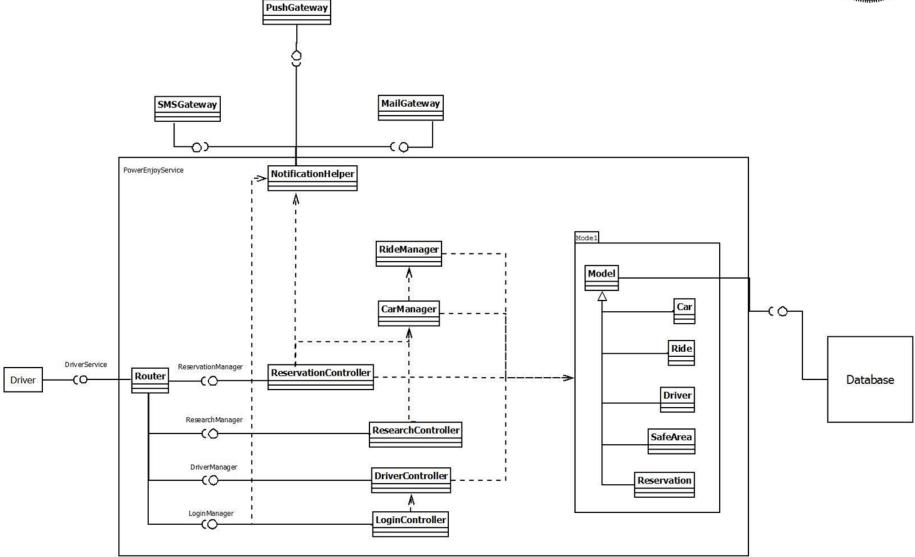






Component Diagram

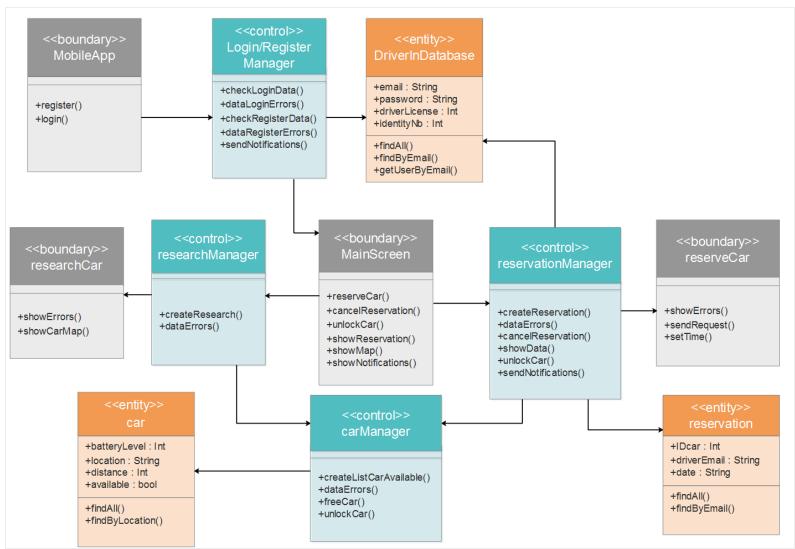






BCE Diagram

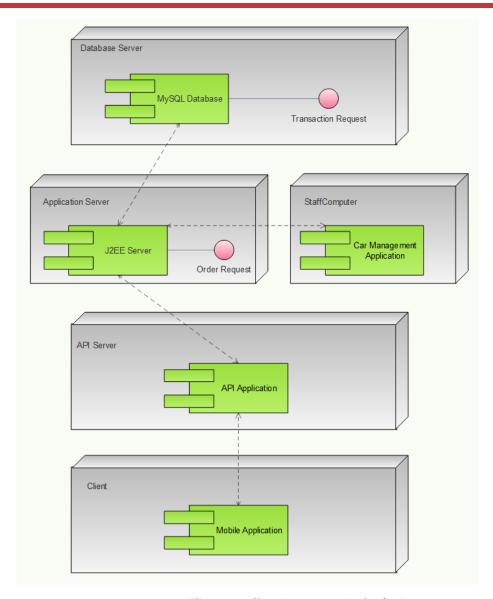






Deployment Diagram

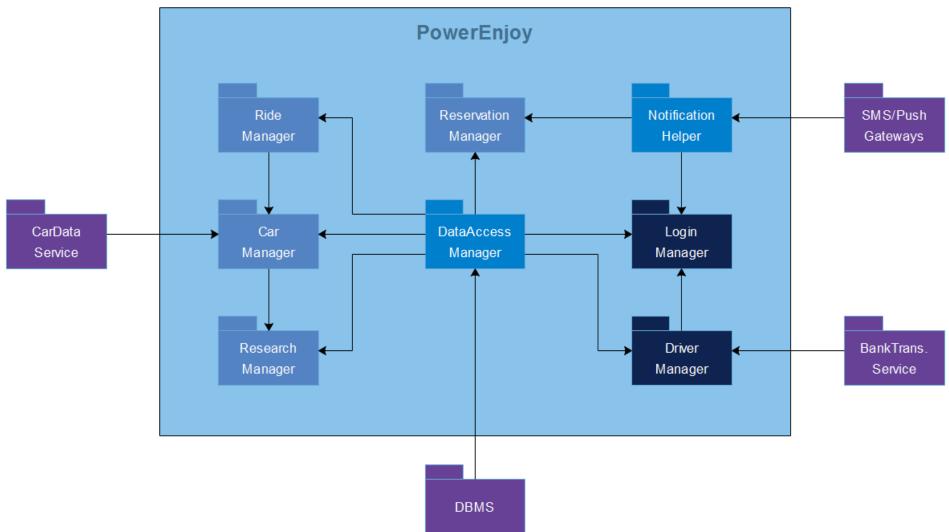






Component Integration







Test Case/Procedure Examples



Test Case identifier	I1T1
Items tested	DBMS → DataAccess Manager
Input specifications	DBMS output
Pass criteria	- The DataAccess Manager check that the data coming in and out are valid
	- If the data coming in are valid, check that it calls the right methods
	- If the data are not valid, signal an error in the process and check that the error
	has been caught
Environmental needs	DBMS driver
Test Case identifier	I1T1

Test Procedure identifier	TP3
Item to test	Car Management System
Purpose	This test will check if the Car Management System:
	- Know the information about rides and reservations
	- Know the current information about every single car
	- Can use those information to signal problems
	- Can share those information with the persons in charge of the cars
Steps	$ 1 \rightarrow 3, 1- 2 \rightarrow 6, 1- 3 \rightarrow 4, 1- 4 \rightarrow 5$



Cocomo II – Function Points



Software analy	sis			Total	
Inputs	3	4	2	37	
Outputs	3	0	1	19	
Inquiry	2	2	0	14	
ILF	6	0	0	42	
ELF	0	1	0	7	
		Total			

High estimation	Low estimation
4998	7973



Cocomo II – Cost Estimation



	Very Low	Low	Nominal	High	Very High	Extra High	Average
Precedentness	6,2	4,96	3,72	2,48	1,24	0	
#Elements	1	0	1	0	0	2	2,48
Flexibility	5,07	4,05	3,04	2,03	1,01	0	
#Elements	0	0	2	0	0	1	2,03
Resolution	7,07	5,65	4,24	2,83	1,41	0	
#Elements	0	3	4	0	0	0	4,84
Team cohesion	5,48	4,38	3,29	2,19	1,1	0	
#Elements	0	0	0	1	1	0	1,65
Process Maturity	7,8	6,24	4,68	3,12	1,56	0	
#Elements	0	0	0	1	0	0	3,12
						SF Total	14,12

	High estimation	Low estimation
Effort (person-month)	11,58	18,91
Duration (month)	7,81	9,08



Gantt's Diagram



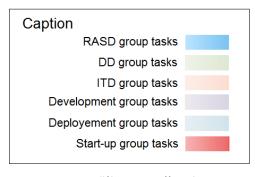




Resource Allocation



Resources Allocation												
Date Name	16/10/16	1/11/16	1/12/16	1/01/	/17 1/02/17	1/0	3/17 1/04	/17 1/05/17	1/06/17	1/0	7/17 1/0	08/17
Vianney Payelle	Tasks 1-5 RASD	Tasi 6-1 DE	0 Components	15		Task 18 Components Integration	Task 16 Unit Testing Code Inspection		Tasks 20-21	Tasks 23 System deployement	Tasks 25-27 Start- up	
Rémi Rigal	Tasks 1-5 RASD	Tasi 6-1 DE	ks 0	Task 17 Components Development			Task 16 Unit Testing Code Inspection	Task 19 Integration System testing	Tasks 20-21 Stakeholders demo Release		Tasks 24 Mobile de ployement	Tasks 25-27 Start- up
Noëlie Ramuzat	Tasks 1-5 RASD	Tasi 6-1 DE	0 12	12 Unit Testing		Task 18 Components Integration	Task 19 Correction Internal tests	Tasks 20-21 User Manual Corrections Release		Tasks 23 System deployement	Tasks 25-27 Start- up	







Thank you

