Call Handler System

Business Requirement Document

Customer / Contract
Handler Module

Index

Group #1

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1. Module Description

The main objective of this software system is to allow a company to handle requests coming from customers. The task was divided in four main groups: Customer/Contract Handler, Central Administrator, Project Management/Handler and Call/Schedule Handler. In this project, our group was assigned the task of modelling the Customer/Contract Handler section.

First of all, we discussed between our group members how our part of the system could be handled. In order to do this and fill the gaps that were not specified in the project requirements, we utilized the Agile working method, discussing the different needs of the customer. One of the main talking and discussion points was what kind of requests could be dealt with by the system, and which group would be involved and responsible for each one of them.

Considering the names of the groups and the project description, we agreed between the different groups that the system would mainly be able to deal with three types of requests. First one would be quick fixes, where only the Call Handler team would be involved. The second option would be for adding or removing service, as well as new customers signing in to the company. For this the Call Handler team would forward the task directly to our group for contract handling, with the Project Management team then delivering the service. And, finally the third option would be for installation projects, where the Project Management team would come in to both check the needs and deliver the product (and the Finance team taking care of the costing tasks).

After this agreement, we were able to proceed with our section of the project with more information. For example, we knew now that we would not get in contact with the customer ourselves, with the Call Handler team always being the one and only group contacting the customer. So from here we could more clearly define our inputs and outputs of information. Input would come straight from the Call Handler team for certain requests, and from the Finance department (which is not represented in the four groups but still takes part in the process) for project requests. On the other hand our information output would be directed to the Project Management team for them to do their service delivery. We also decided that, due to the usual situation of contracts being continuously reviewed until an agreement is reached, there should be a back and forth negotiation kind of process during the contract preparation. This would happen first of all internally with the Finance department, and then externally with the customer via the Call Handler team.

From here, it was possible for us to determine the use cases for our user profile. First of all, we would need a login provided by the Central Administrator in order to access our section of the system. Then, we would have a page with a list displaying all tickets created by either the Call Handler team or the Finance team. We would then be able to work on them by opening the ticket, which would open the contract registration form. There we would choose between creating a new ticket for a new customer, or an update of an existing contract for an existing customer. After saving the contract, the ticket would be sent to the finance department, and we would not be involved in the following process, until both finance and customer agreed to the terms specified. When this process was finished, the ticket would be assigned to us again and there we would just have the task of reviewing the form and details and signing it, before registering it on our database and then sending the ticket to the PM team to finish our part of the process.

After doing the whole process of preparation of diagrams and looking at the details of the project for two weeks, it is clear that there are some areas where we could have done a better job. The login action for example, probably should have been left for the Central Administrator to handle, and assume that whenever we are using the system, we have already gone through the process of getting a user and a login. Apart from this, another possible improvement is fixing the fact that the input and output of information are not completely uniform. The input can be direct from the Call Handler team, whereas the output always goes through the PM team. In our view, tasks that don't require a new project should be able to be managed between the Call Handler and Contract Handler teams only, without having to involve the PM team in the delivery.

Another possible improvement is related with the way in which the contract would move between the parties. In this specific case, the customer is the first one to actually sign the contract, with this contract then being forwarded to the Contract Handling team and signed by the company representatives. From real life scenarios, we can say this should be done the other way around. Usually the company finalises the preparation and signing of the contract before the customer's time to sign the contract arrives. The customer should always receive the finalised contract from the company (signature included) and then decide if they sign it or not. This change would also result in a more easy to follow process flow.

About the actions that were done and were effective, it's important to note how positive it was to have this classroom-wide discussion of the project at the beginning of the development. In a project like this one that involves different groups, it becomes crucial to have a discussion with the other groups early on in the project. First of all, part of your own project depends heavily on what other groups do, so you can't really finalise your part until you know what other groups expect from and provide for you. It also helps to get a clearer idea of the whole problem and how the process should flow step by step. Doing Scrum meetings with other teams allows everyone to

agree on certain requirements and it allows us to continue with the development work without having to worry on these gaps or grey areas anymore.

In general, we can say that there are areas for improvement, as with every project, but these two weeks definitely gave us a good insight and understanding of how the development of a software project works and what actions need to be taken in order to deliver an effective software solution.

2. Requirements

Below is the list of contract handler module requirements :

G1.R1)System Authentication: accessing the system using a contract handler user.

G1.R2)System Authorization: contract handler role and privileges.

G1.R3)Check Requests : display the assigned tickets by call handler and finance teams.

G1.R4)Determine ticket type (New or Update Contract).

G1.R5)Prepare the contract.

G1.R6)Send the contract to the finance team for validation.

G1.R6.1) Validate contract by finance team.

G1.R6.1.1) If the finance team doesn't accept the contract, the contract returns back for the contract handler for review (Go to G1.R5).

G1.R6.1.2) If the finance team accepts the contract then they forward it to the call handler.

G1.R6.2) Call handler validates contract with customer.

G1.R6.2.1) If contract terms require revision/update the contract returns back to contract handler team (Go to G1.R5)

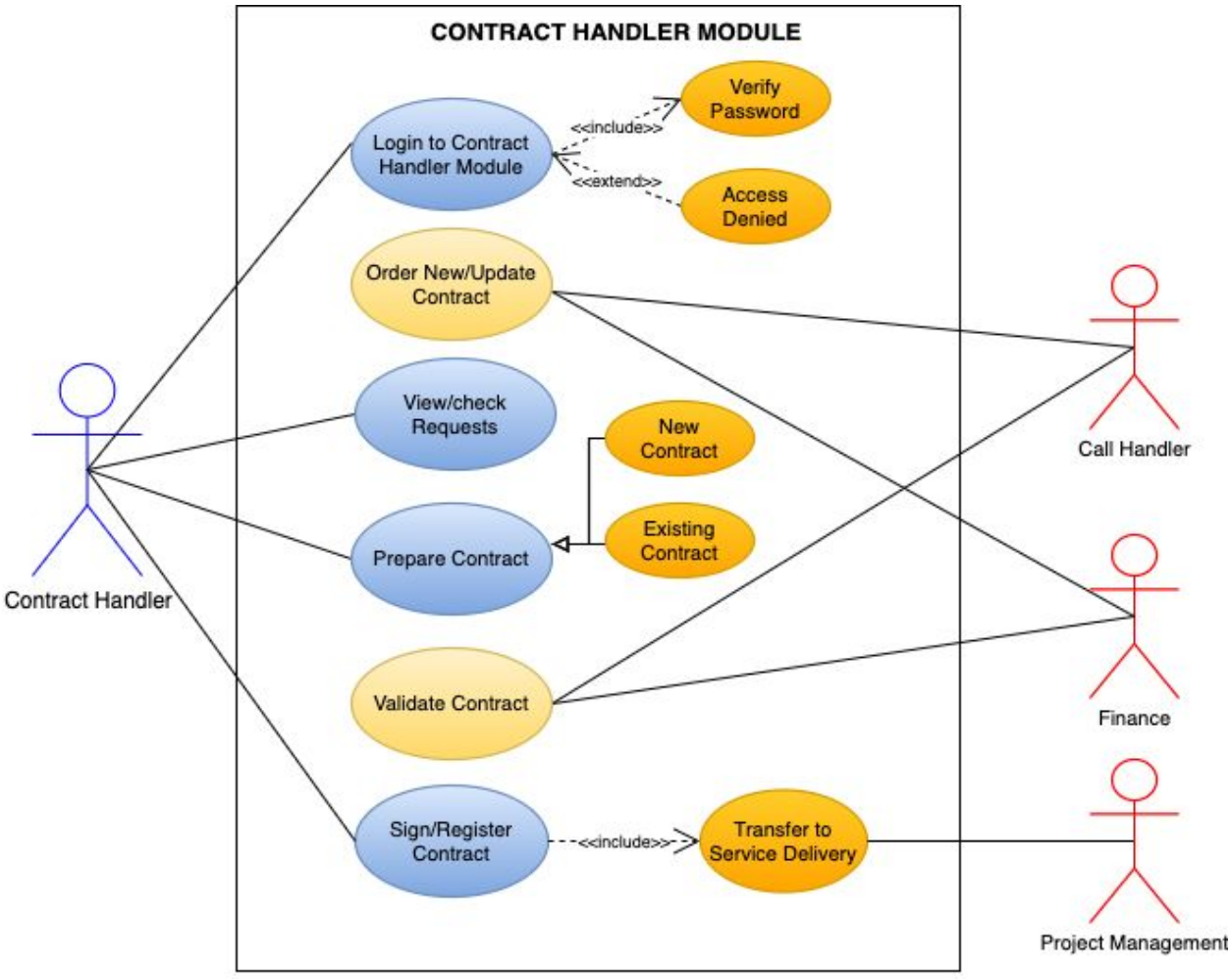
G1.R6.2.2) If the customer doesn't accept and wants to cancel the contract the ticket is closed (Go to End).

G1.R6.2.3) Receive the contract after positive validation from the call handler team.

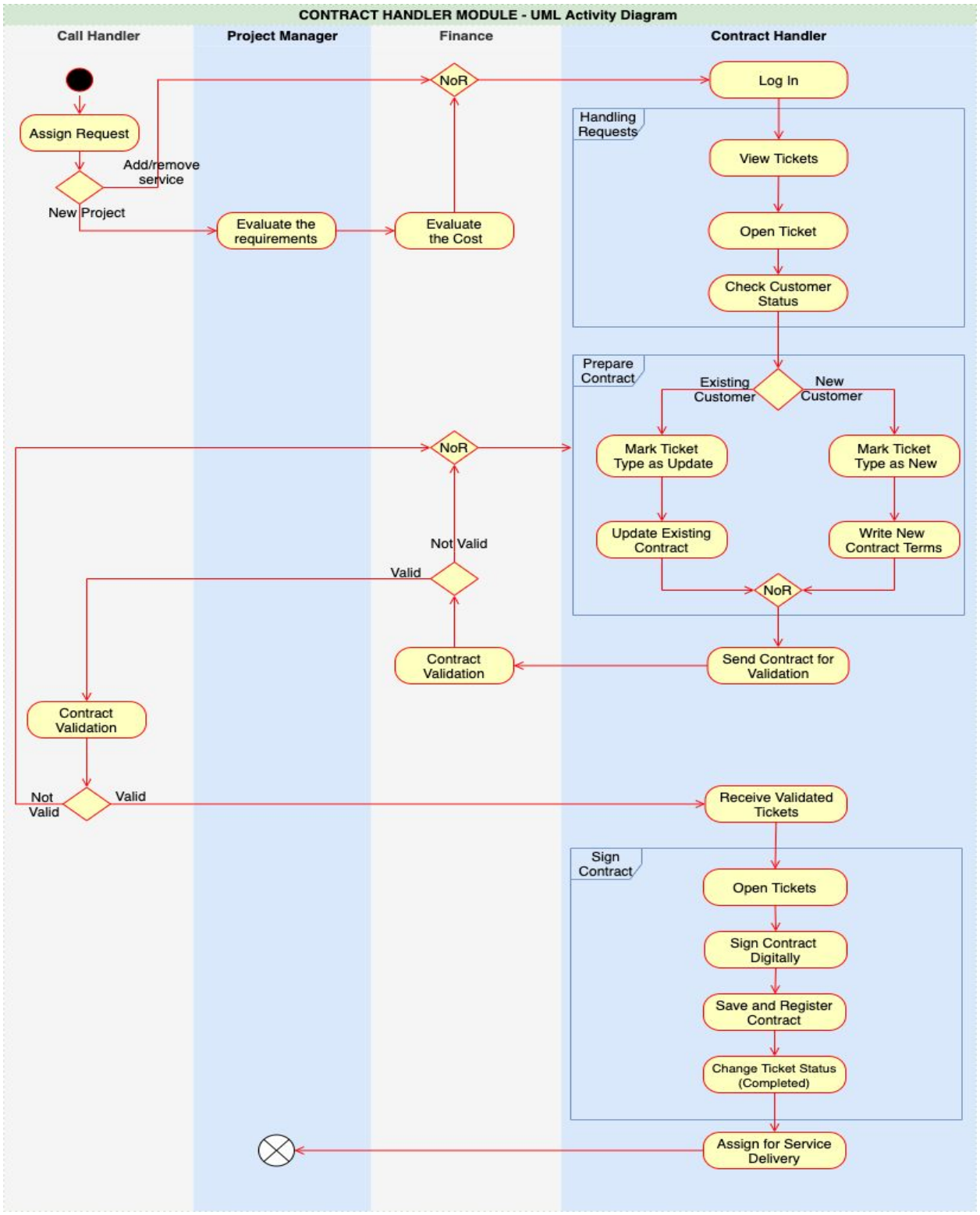
G1.R7)Sign the contract digitally and save.

G1.R8)Forward the contract ticket to the project management team.

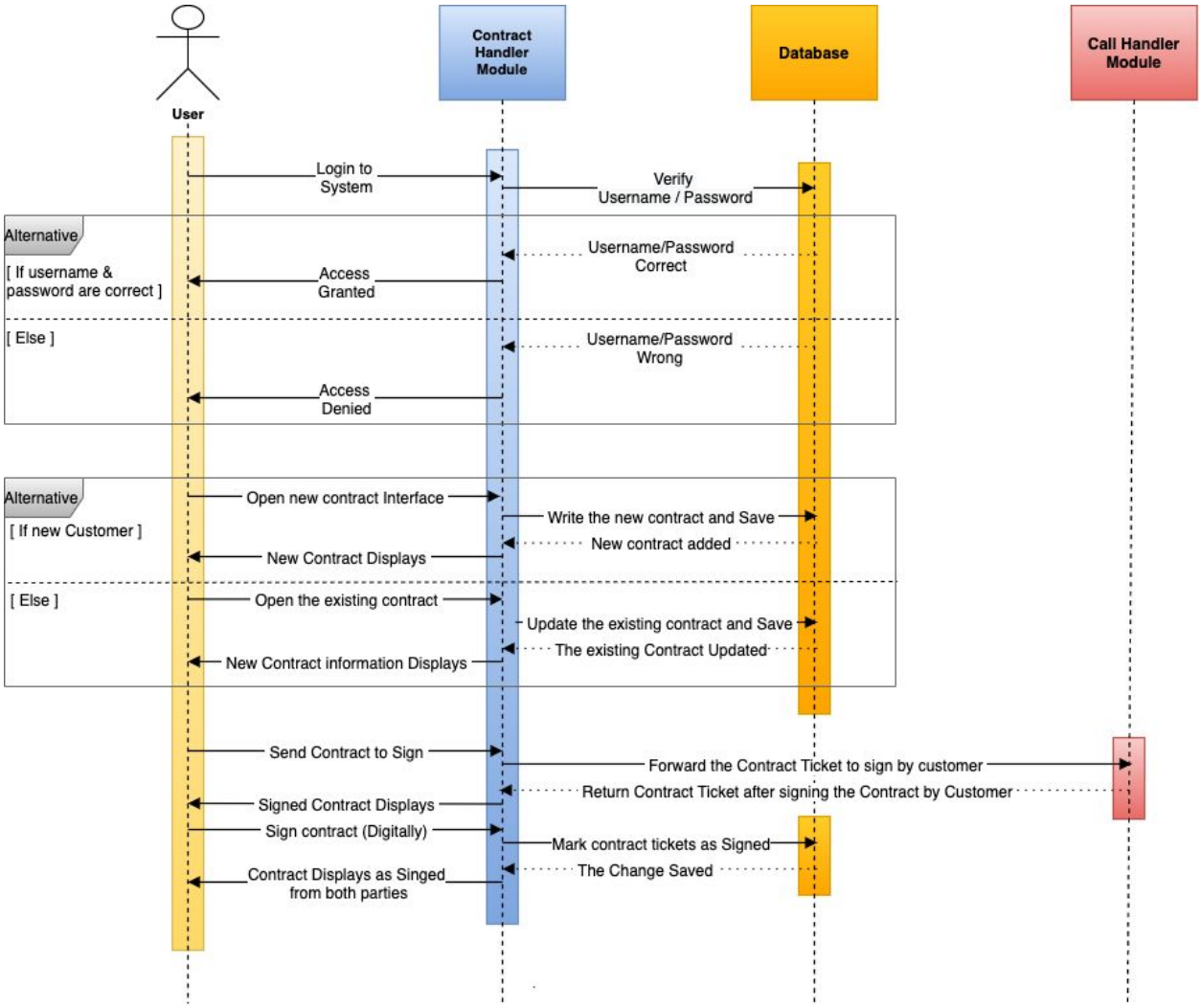
3. Use Case Diagram



4. UML Activity Diagram



5. Sequence Diagram



6. Requirement Traceability Matrix (RTM)

Use Case	Test Case	Test Description	Expected Result	Status	Date	Note
G1.R1	TC1	Login with correct username and password.	Access Granted	Pass / Fail		
G1.R1	TC2	Login with incorrect username or password.	Access Denied	Pass / Fail		
G1.R1	TC3	Login attempt twice with incorrect password.	User get an account block warning of next attempt	Pass / Fail		
G1.R1	TC4	Login attempt twice with incorrect password and third attempt with a correct username and password.	Access Granted	Pass / Fail		
G1.R1	TC5	Login attempt three times with incorrect username or password.	Access Denied and account block	Pass / Fail		
G1.R2	TC6	Login with correct username and password to access the contract module with right privileges.	Users just access the contract handler module.	Pass / Fail		
G1.R3	TC7	Check the assigned tickets from the Call Handler.	Display the call handler tickets	Pass / Fail		
G1.R3	TC8	Check the assigned tickets from the Finance Department.	Display the Finance tickets	Pass / Fail		
G1.R3	TC9	Check the assigned tickets from two different user-interfaces.	Tickets should be synchronized in both user interfaces.	Pass / Fail		
G1.R3	TC10	Whole tickets count	Display total number of tickets.	Pass / Fail		
G1.R3	TC11	Choose In progress ticket filter and count the displayed tickets in request view , it should be matched to the ticket count in the bottom.	Total count of in progress tickets should match the displayed ticket list in the view.	Pass / Fail		
G1.R3	TC12	Choose “Close” ticket filter and count the displayed tickets in request view , it should be matched to the ticket count in the bottom.	Total count of close tickets should match the displayed ticket list in the view.	Pass / Fail		
G1.R3	TC13	Choose “Done” ticket filter and count the displayed tickets in request view ,	Total count of done tickets should match the	Pass / Fail		

		it should be matched to the ticket count in the bottom.	displayed ticket list in the view.			
G1.R4	TC16	Open the ticket and choose a new contract option.	Ticket type marked as new contract.	Pass / Fail		
G1.R4	TC17	Open the ticket and choose the update contract option.	Ticket type marked as update contract.	Pass / Fail		
G1.R4	TC18	Open ticket and save without choosing any of contract type options and save.	An alarm message pops up and urges the user to choose one of the contract types.	Pass / Fail		
G1.R4	TC19	Open ticket and select the both contract type options and save.	An alarm message pops up and urges the user to choose one of the contract types.	Pass / Fail		
G1.R5	TC20	Write new contract and save	New contract save and the related ticket marked as prepared	Pass / Fail		
G1.R5	TC21	Save the request (marked as new contract) without writing the contract	An alarm message pops up and urges the user to write the contact and complete it before saving the ticket.	Pass / Fail		
G1.R5	TC22	Update an existing contract and save	The new change added to the existing contract and the related ticket marked as prepared	Pass / Fail		
G1.R5	TC23	Save the request (marked as update contract) without updating the contract	An alarm message pops up to notify the user that no change is done and ask for a confirmation to be processed.	Pass / Fail		
G1.R6	TC24	Forward the related ticket request to Finance team	Tickets appear on the Finance module and marked as pending for Finance validation.	Pass / Fail		
G1.R6.1.1	TC25	Finance rejected the contract	Related tickets returned back from Finance and marked as revision required.	Pass / Fail		
G1.R6.1.2	TC26	Call Handler rejected contract.	Related ticket returned back from the Call Handler and was	Pass / Fail		

			marked as revision required.			
G1.R6.2.3	TC27	Finance accepted contract and Call Handler Accepted.	Related ticket returned back from the Call Handler marked as ready for signature.	Pass / Fail		
G1.R7	TC28	Sign the contract digitally with entering a correct password and save	The digital signature appears on the contract and save the contract in database and related ticket marked as signed	Pass / Fail		
G1.R7	TC29	Sign the contract digitally with entering a wrong password.	The operation fails and an alarm message pops up to urge the user to enter the correct password or terminate the operation and rollback.	Pass / Fail		
G1.R8	TC30	Assign ticket to project management after adding the digital signature.	Ticket marked assigned to Project Management. .	Pass / Fail		
G1.R8	TC31	Assign ticket to project management before adding the digital signature.	The operation fails and an alarm message pops up to urge the user to sign the contact before forwarding the ticket to the PM team.	Pass / Fail		