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1. Executive Summary

1.1 Project Overview

We all face difficulties when it comes to fixing something, we lack the knowledge of. What is even more difficult is adapting and finding the time to meet skilled persons which are going to fix your problems. Obviously, we cannot find a solution to any problem in the world but our team is glad to try and relieve some stress when it comes to fixing problems related to your household. As we mentioned, in this fast-paced world it is often hard to find the time needed to take care of various issues that occur within our houses. Let them be, cleaning support, various furniture assembly, installations needed around the house, which are made possible only by someone who is a skilled electrician, plumbers and so on. What we can acknowledge is that some of this complication can be fixed by anyone who finds the desire but we have something else in mind.

What we are suggesting is a home services management system which will consist of an application. This app will take care of the gathering of the most requested services into one platform. By doing so we aim to achieve efficiency and improve the user experience.

1.2 Purpose and Scope of this Specification

Our purpose as developers is to improve the user's experience and simplify as much as we can the home-services finding and reservation process. The app is going to provide the following:

- 1. Searching for a specific skilled person/ or company.
- 2. Booking a specific skilled person.
- 3. Billing functionalities for the users.
- 4. Learning new skills.
- 5. Bidding functions for a specific job description.

2. Product/Service Description

Our app is able to provide a way to automate the whole searching and booking process of a specific home-service. Fixing day to day problems in our household is becoming more and more difficult since finding the appropriate persons skilled to offer a solution are not easily to be found.

The product we are offering is available to be used by all the persons involved in this specific process: the users, the workers, the magazines/ companies that offer specific tools, etc. Our app will provide

practical solutions to all the requirements presented by the stakeholders.

2.1 Product Context

This product is independent and self-contained. Currently similar products of eye clinic management systems are being developed to benefit from the ease and convenience of having the management system in a web application. Although these products are of a bigger scale and meant for a wide publicum and usually are not affordable to many clinics.

Our product on the other hand will be designed to first and foremost meet the requirements of our current client. This product is not intended to communicate with other systems. It is intended to work within the scope of a specific clinic and its clients.

2.2 User Characteristics

This product is intended to be used from the following users:

Guest (Visitors - no login required)

Guests can come from different age groups and backgrounds. Guests can be users who hold different backgrounds although it can be accessed only by persons who are more than 16 years old. Our app will make possible of offering the users of this view the most part of functionalities that registered users can access. They will be able to check out all the services offered in the app. They can skim through the majority of workers (possibly the top-rated ones for each service) but they cannot book a service/ worker. They will also be able to check out the Learn Skills blog where the workers registered on the app are going to offer their aid to simple users. This will be explained by detail in the User Interface section of the document and the functional requirements section.

Registered Users

Registered users are guests who have already created an account in our app and they are looking forward to profit from the services available in the app, the main one being booking a specific skilled worker to offer some service. Its view will be the same as that of non-registered user but some added functionalities will be available. The workers will be available without restrictions, the magazines and Groups as well. Every detail will be specified in the UI section of the document

Workers

Workers are skilled persons who choose to access the app in order to provide some services to the users of the app. They can register in the app, set up their profiles, and start taking orders from users. They can also form unions with one another in order to provide unified services and they can access magazines in order to acquire all the materials needed to provide a specific service. The workers can access the bidding system powered by the users. They can offer their worker and make their offers for a specific service, while communicating with the users through this system. The workers UI will be specified in the below section as well but the functionalities between users and workers are different.

Magazines

Magazines will include companies who join the app in order to offer some aid to the workers and users as well. Magazines will be able to set up their profile, specifying the NIPT of the company. In their profile they will be able to include all the products offered along with their prices. Payment methods and prices will be included too. Users will be able to search for specific tools and the nearest magazines will be available in the search results. Workers can directly contact the magazines for further details regarding some materials needed for a specific service. Magazine View will be specified and described in the User Interface section of the document as well.

1. Requirements

1.1 Functional Requirements

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_G_01	A user can access the services of the app even though not registered.	A user can check out the available services registered on the app even though he has not created an account.	2	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_G_02	The app should provide a list of the available services under the Services Menu	The services menu lists out all the accessible services in the app.	1	20/04/22	A.Cenga, D.Hyseni E.Bici
BR_P_01	The app should provide a reduced list of the toprated workers for each service, for guests.	When accessing a service, guest users are presented to the top 5 workers/ service.	2	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_G_03	The app must send a verification e-mail to workers who successfully create an account.	Each worker will be verified by a specific team.	1	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_G_04	The profile of a worker cannot be created if he/ she has not included his working ID.	Part of the verification process of the worker.	3	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_05	The app should allow the workers to include a calendar of their availability in their account.	The calendar must be available to registered users.	1	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_R_01	The app should allow the users to give feedback for specific workers.	The feedback's range is from 0/5 stars to 5/5 stars.	2	20/04/22	A.Cenga, D.Hyseni, E.Bici

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_R_02	Users will be able to give feedback only to booked workers.	Only for workers who have offered their service to a specific user.	1	15/04/22	A.Cenga, D.Hyseni, E.Bici
BR_R_03	The app will enable a searching feature through a search bar.	It will be possible to take a closer look of some specific services or workers through the search bar.	1	15/04/22	A.Cenga, D.Hyseni, E.Bici
BR_R_04	The search bar will be functional through the usage of key words.	Each user can include key words for services, workers, magazines and the cured list will show up on the page.	1	15/04/22	A.Cenga, D.Hyseni, E.Bici
BR_R_05	The app will enable searching for specific worker or service/s.	The users can search up by worker name or by service name.	3	15/04/22	A.Cenga, D.Hyseni, E.Bici
BR_R_06	The workers menu will list out all the available workers.	The workers will be divided in service categories in the Worker Menu.	1	15/04/22	A.Cenga, D.Hyseni, E.Bici
BR_P_01	The available workers in the menu will be sorted by default given their rate.	The workers present in the Worker Menu will be sorted in a descending order based on their rate.	2	15/04/22	D.Rabeli, D.Duma, A.Ligori
BR_P_02	The system should allow the users to log in the app given their credentials.	Login credentials: username, password	1	15/04/22	D.Rabeli, D.Duma, A.Ligori
BR_P_03	The system should allow the workers to log in the app given their credentials	Login credentials: workerID, password	1	15/04/22	D.Rabeli, D.Duma, A.Ligori

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_P_04	The app should allow the worker to set up a profile picture.	This is a mandatory requirement and the profile picture should be accordingly to the	1	25/04/22	A.Cenga, D.Hyseni, E.Bici
		specified terms.			-
BR_P_05	The app should allow the worker to modify the personalized calendar.	If a worker accepts a booking from the user, he inserts it into its personal calendar.	3	25/04/22	A.Cenga, D.Hyseni, E.Bici
BR_P_06	The worker should be allowed to include the price/ service in their profile.	The price offered for each service has to be included by the worker.	1	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_E_01	The worker should be allowed to include the payment method in their profile.	The payment method to be utilized is based on: CreditCards, PayPal, Bank Account.	2	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_E_02	The worker should be able to manage the bookings through the app.	A worker accepts or declines a request from a user.	2	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_E_03	The app should provide a list of auctions under the Auction Section.	The Auction Section lists out all the ongoing auctions sorting them in an ascending order given the deadline.	2	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_E_04	A user must be registered if he wants to put a project in an auction.	Each registered user is allowed to use the auction functionality.	2	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_E_05	The project must be explained briefly and must start with a default bid.	The workers can bid only with a price higher than the default bid	2	15/04/22	A.Cenga, D.Hyseni, E.Bici
BR_E_06	The system allows a single user and a group to participate in the auction depending on the user requirement.		2	15/04/22	A.Cenga, D.Hyseni, E.Bici

Req#	Requirement	Comments	Priority	Date Rvwd	SME Reviewed / Approved
BR_D_01	The app fires a penalty if workers report 5 auctions of the same user.	Each user account is removed from the app whenever the penalties have reached a limit.	2	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_D_02	The system allows an auction to be available for only 7 days.	Once an auction is over, the highest bid is selected.	1	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_D_03	The app processes the booking of the auction the same way as that of a single service.	After an auction is terminated, each involved worker will be booked through the standard way.	3	20/04/22	A.Cenga, D.Hyseni, E.Bici
BR_D_04	The app allows magazines to be registered.	In order to do so it must contain an official NIPT	2	15/04/22	A.Cenga, D.Hyseni, E.Bici
BR_D_05	The system allows magazines to include all the products available.	Under the products section of each magazine profile, all the product available will be displayed.	3	15/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_05	The app provides the feedback system for magazines as well.	Each magazine will include the user rating in its profile	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_05	The system allows magazines to login with the respective credentials	Login credentials: magazineNIPT password.	1	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_05	The system monitors reports for each magazine.	If a magazine is reported more than 20 times it will be closed.	3	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_05	The workers can be organized in groups.	The group section has increased functionalities for users registered as workers.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_22	The system allows each worker to participate in no more than 2 groups.	Each worker can join a group whenever a specific skill is missing	2	22/04/22	A.Cenga, D.Hyseni, E.Bici

	ADEZYOU Wanagement S	System Requirements Specif	ication		
BR_GR_22	A user can access the groups through the groups section.	The users can only check out the available groups and they can book them given a full service required.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_22	Each group is specialized in a specific full service.	Some default full services will be provided by the system and each worker can join them based on the specified conditions.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_22	The app allows searching for full services.	Whenever inserting a full service as a key word in the search bar, some specific groups that contain those keywords will be available.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_23	The system should be able to charge customer and do refunds when needed.	Whenever a user books a service/worker all the procedural payments are performed through the system.	1	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_24	The system should allow multiple ways of payments.	Payments could be performed through - Paypal, - CreditCard - Online transfers.	1	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_25	The system should generate an invoice for each payment	The bill should be generated whenever a service is successfully booked.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_26	The client should have the right to choose between two types of payment transactions: one-time purchases and periodic purchases.	When user registers and pays a monthly subscription to all courses available by the workers.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_27	The payment system should be able to support when users enter discount coupons or promotion codes.	An empty field should be available besides the book button used to insert all promocodes and coupons.	3	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_28	The system will be able to charge customers a fee every time they make a transaction.		1	22/04/22	A.Cenga, D.Hyseni, E.Bici

	, , , , , , , , , , , , , , , , , , ,	system Requirements Specif			
BR_GR_29	The system can see all the types of transactions made inside system and the details for every transaction.	The workers and user will be able to see all the transactions involving their profiles.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_30	When workers set up their account, they will set up a payment method and a place in database is going to be stored for workers.	The worker should choose before hand the type of payment procedure to be followed by the users.	1	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_31	Payments details and transactions made for a current worker will be divided in two parts	The transactions made for work and the transactions made for learning purposes.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_32	When magazines set up their account, they will set up a payment method and a place in database is going to be stored for magazines	They will be able to see the transactions made for a current period of time and their details.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_33	Workers can upload videos and lectures to the system, every lecture will be checked and verified before posting.	Under the skills learning section, a list of the most liked videos will be displayed.	1	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_34	Users can search by lecturer name, or by the topic they want to learn.	The search field works just like the main view search field, using keywords.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_35	System will allow customers to write personal notes on a current course they purchase.	The courses which are available under each worker profile, should provide a short description too.	3	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_36	The system will reward customers with certificates after following the full course.	The courses organized by the workers will have sponsorships from technical schools which will enable the reward with certificates.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_37	Workers must publish a description of the course	The course goal, what clients benefits from this course, requirements that are needed to follow this course, etc.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici

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BR_GR_38	System will name workers as verified lecturers when posting more than 20 videos.	Whenever the limit of 20 videos is reached, given a specific like amount, the workers become verified lecturers.	3	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_39	Verified lecturers can make real time online class sessions and post them on the courses after finishing.	For each worker that has more than 20 videos posted a new section will be shown in the worker profile, allowing them to start live sessions.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_40	Workers have the ability to post documents and quizzes on their courses.		2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_41	System will generate a private chat between every customer and the worker.	Under the course detail, a simple contact chat will be available so that the users can directly ask course related questions to the worker.	3	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_42	System will allow reviews on courses	A feedback system will be provided to courses as well, rating them based on different categories from 0/5 to 5/5 stars.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici
BR_GR_43	Worker must upload a text following everything that is explained in lessons, so that system can support screen readers and captioning.	A transcript has to be included under each posted video.	2	22/04/22	A.Cenga, D.Hyseni, E.Bici

3.

4. Software Design

4.1 User Scenarios/Use Cases

4.1.1 User scenarios.

- 1. Scenario title: Worker log-in into the app.
 - a. The worker opens the application.
 - b. The homepage of the app shows up and the worker clicks on the registration section
 - c. At the registration section he acknowledges that he already is registered in the app by clicking the login button
 - d. After that he enters the log-in view where he specifies, he's entering as a worker.
 - e. After doing so, he is required to enter his credentials, his worker ID and the password.
 - f. The worker clicks on the Log- in button and the worker view is available to our app's user.

2. Scenario title: User log-in into the app.

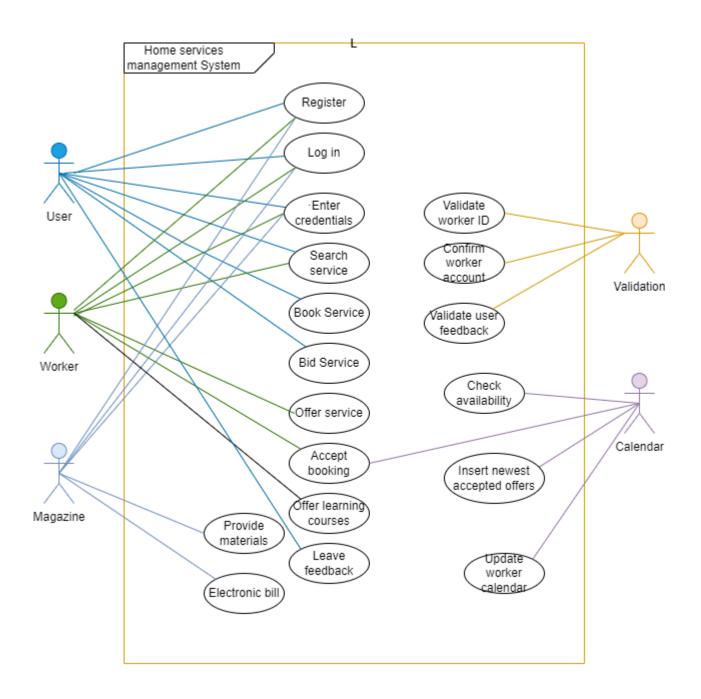
- a. The user opens the application.
- b. The homepage of the app shows up and the user clicks on the registration section.
- c. At the registration section he acknowledges that he/ she is already registered in the app by clicking the login button.
- d. After that he enters the log-in view, where he specifies, he's entering as a normal user that seeks to book a service.
- e. After doing so, he/she is required to enter his/her credentials, his personal ID and password.
- f. The user clicks on the Log-in button and the user view is available to our app's user.

3. Scenario title: Magazine log-in into the app

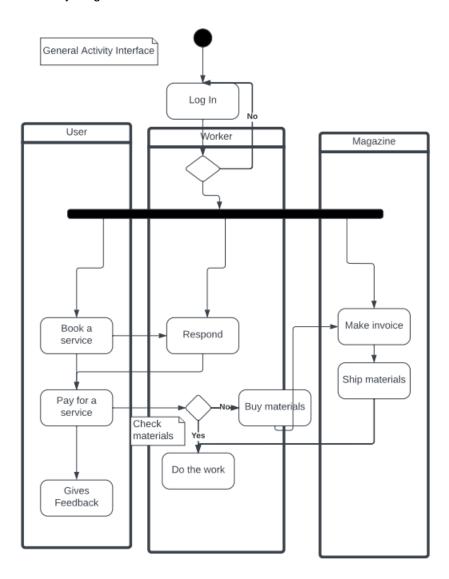
- a. The magazine opens the application
- b. The homepage of the app shows up and the magazine clicks on the registration section.
- c. At the registration section he acknowledges that it is already registered in the app by clicking the login button.
- d. After that, the magazine enters the log-in view where it specifies that the magazine's is entering as a magazine to provide functionalities.
- e. After doing so, the magazine is required to enter the credentials, the NIPT and password.
- f. The magazine clicks on the Log- in button and the respective view becomes available.

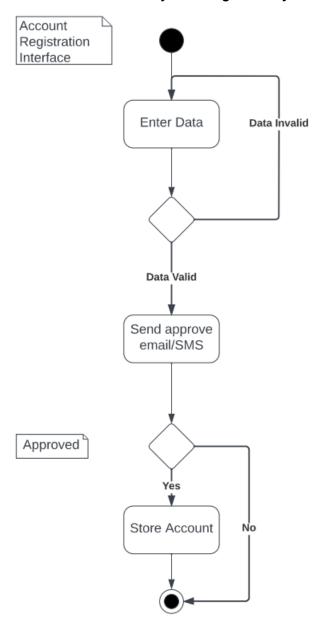
- 4. Scenario title: Worker registration into the app.
 - a. The worker opens the application.
 - The homepage of the app shows up and the worker clicks on the registration section.
 - c. At the registration section he specifies that he/ she is registering as a worker.
 - d. He is required to enter the worker id, to create a password and verify it, to enter his/her name and surname.
 - e. After doing so, he clicks on verify.
 - f. The respective team deals with the verification of the account.
 - g. After 1 week, the account is opened.
- 5. Scenario title: User registration into the app.
 - a. The user opens the application.
 - b. The homepage of the app shows up and the user clicks on the registration section.
 - c. By default, the user registration form is displayed.
 - d. The user fills up the required boxes, such as personal id, name, surname, password, confirmation of the password, e-mail, and username.
 - e. The user clicks on register.
 - f. The account is created.
- 6. Scenario title: Magazine registration into the app.
 - a. The magazine owner opens the application.
 - b. The homepage of the app shows up and the owner or manager must click on the registration section.
 - At the registration section the owner specifies that it is registering a magazine.
 - d. After clicking the magazine button, the registration form shows up.
 - e. The magazine enters the credentials such as, name of the magazine, password, confirmation of the password, NIPT number, address and phone number.
 - The magazine clicks on register.
 - g. The account is created instantly.
- 7. Scenario title: User wants to book a service.
 - a. The user opens the application.
 - b. The user makes sure he is logged in.
 - c. On top of the homepage there is located the search bar.
 - d. The user searches for the required service.
 - e. The search bar outputs by default the workers that offer these services ranked from cheaper to most expensive.
 - f. The user chooses one worker that fulfills the needed requirements.
 - g. The user clicks on book after setting a date based on the availability calendar of the worker.

- 8. Scenario title: Worker accepts a booking request.
 - a. The worker opens the app.
 - b. He/ she makes sure he/ she is logged in.
 - c. In the notifications section of his profile he checks for recent bookings.
 - d. The worker finds it suitable to work for the user.
 - e. The worker clicks the acceptance button.
 - f. An instance of the meeting will be automatically inserted in the calendar.
 - g. A notification is sent to the user by the app.
- 9. Scenario title: Worker does not accept a booking request.
 - a. The worker opens the app.
 - b. He/ she makes sure he/ she is logged into the app.
 - c. In the notifications section of his profile he checks for recent bookings.
 - d. The worker does not find it suitable to work for the user.
 - e. The worker declines the booking.
 - f. A notification is sent to the user by the app.
- 10. Scenario title: The user bids a service.
 - a. The user makes sure he is logged in. Then he enters the services section of the app.
 - b. On the top right of this section, a bidding button is available.
 - c. The user clicks on this button.
 - d. The user specifies the service to be completed.
 - e. The bid is published in the section along with other user's bids.
- 11. Scenario title: The worker throws a bid.
 - a. The worker makes sure he is logged in. Then he enters the services section of the app.
 - b. Inside of this section a bidding button is available.
 - c. The worker can not throw any new bids but it can access those published by the user.
 - d. Whenever a service is suitable, he bids on the offer.

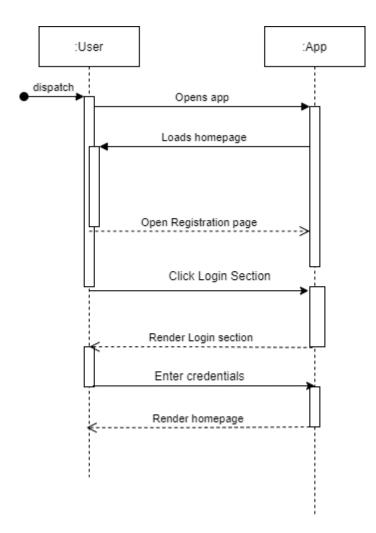


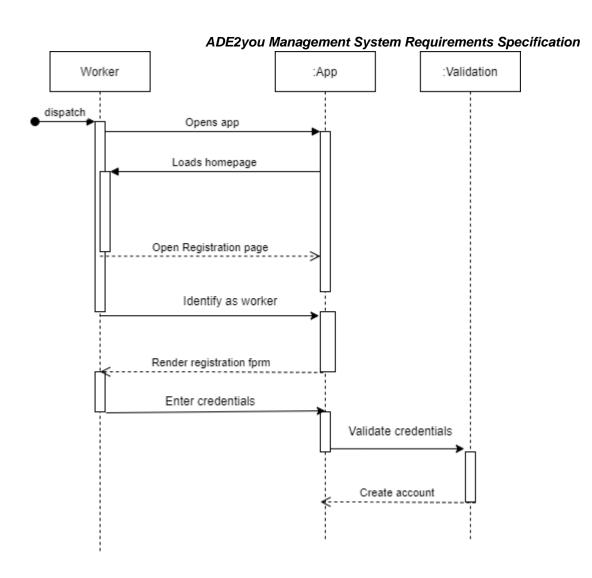
Activity diagrams:





Sequence Diagrams:





BPMN:

