COMPANY NAME

QuickVac
we innovate healthcare
VERSION 1.0

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Document History

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Authors	Hamza Yousaf Idrees Mehmood Abdur Rehman Muhammad Nouman Numan Nadeem
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1.Introduction:

1.1 Purpose:
To build a program that facilitates a user to apply for COVID-19 Vaccination.

1.2 Intended Audience:
Applicants and medical staff member.

1.3 Scope:
Main goal and objective of this program is to regulate a user to apply for desired vaccine.

User And System Requirements

User Requirements:

- The system shall enable user to register for vaccine and print certificate upon paying charges.

System Requirements:

- The system shall retrieve data from applicant.

- The system shall check applicant details.

- The system shall check the vaccination details.

- The system shall reserve vaccine for the applicant.

- The system shall allocate vaccine to the applicant.

- The system should generate tracking ID for paying charges.

- The system shall retrieve charges from the applicant.

Requirements cont…

Functional Requirements:

1. A user shall be able to enter and submit details for vaccination.

2. The system shall check the valid details and records for applicant.

3. The system shall add record to database.

4. The system should generate tracking ID.

5. The system shall print certificate to the applicant.

Non Functional Requirements:

System load up time:

Time to load UI , function etc. It is different in different devices like laptop, phone, tablet etc.

Security:

         It provide security to a user. Each person data is secured no one will check user saved data.

Maintainable:

         Each of the modules should be designed in such a way that a new module can easily be integrated with it.

Usability:
         Ease of use of system.

User classes

Primary Actor	Use Cases
Applicant	1) Provide applicant details 2) Allocate Vaccine 3) Pay charges for certificate 4) Print certificate

Secondary Actor	Use Cases
Medical Staff Member	1) Provide vaccination details 2) Allocate vaccine 3) Print certificate

Use Case -- 1

ID and Name:	UC-1 Provide Applicant details		
Created By	Abdur Rehman	**Date Created**	22/10/2022
Primary Actor	Applicant	**Secondary Actor**	Medical staff member
Description **Trigger**	End user needs to provide the details related to the applicant to the system. Applicant Detail Provided.		
Precondition	End User must have details related to the applicant.		
Post condition	Applicant Details Added To The System.		
Priority	High		
Normal Flow	**Provide Applicant Details** 1. End user enter applicant details to the system. 2. System check the provided details. 3. System verified the details. 4. Applicant acknowledged to the system. 5. Applicant details added to the system.		
Alternate Flow	**System failed to validate the applicant details** 1. End user provide the details of the applicant. 2. System not respond to the operation. 3. System shows a message "enter correct applicant data". 4. End user provide the applicant details again. 5. System respond with server not responding error.		

Use case -- 2

ID and Name:	UC-2 Provide Vaccination Details			
Created By	Numan Nadeem		Date Created	22/10/2022
Primary Actor	Applicant		Secondary Actor	Medical Staff Member
Description Trigger	End User needs to provide the vaccination's detail of applicant to the system. Vaccination Detail Provided.			
Precondition	Medical Staff Member must have detail related to applicant.			
Post condition	Vaccination Details Added To The System.			
Priority	High			
Normal Flow	**Provide Driver Details** 1. Staff Member enter applicant details to the system. 2. System check the provided details of applicant. 3. System verified the details. 4. Applicant acknowledged to the system. 5. Applicant Detail Added to the system.			
Alternate Flow	**System failed to validate the applicant.** 1) Staff Member provide the details. 2) System shows a message "enter applicant details again". 3) Staff Member provide the details again. 4) System respond the applicant's details already exist. 5) Staff Member try to submit details. 6) System not responded.			

Case User -- 3

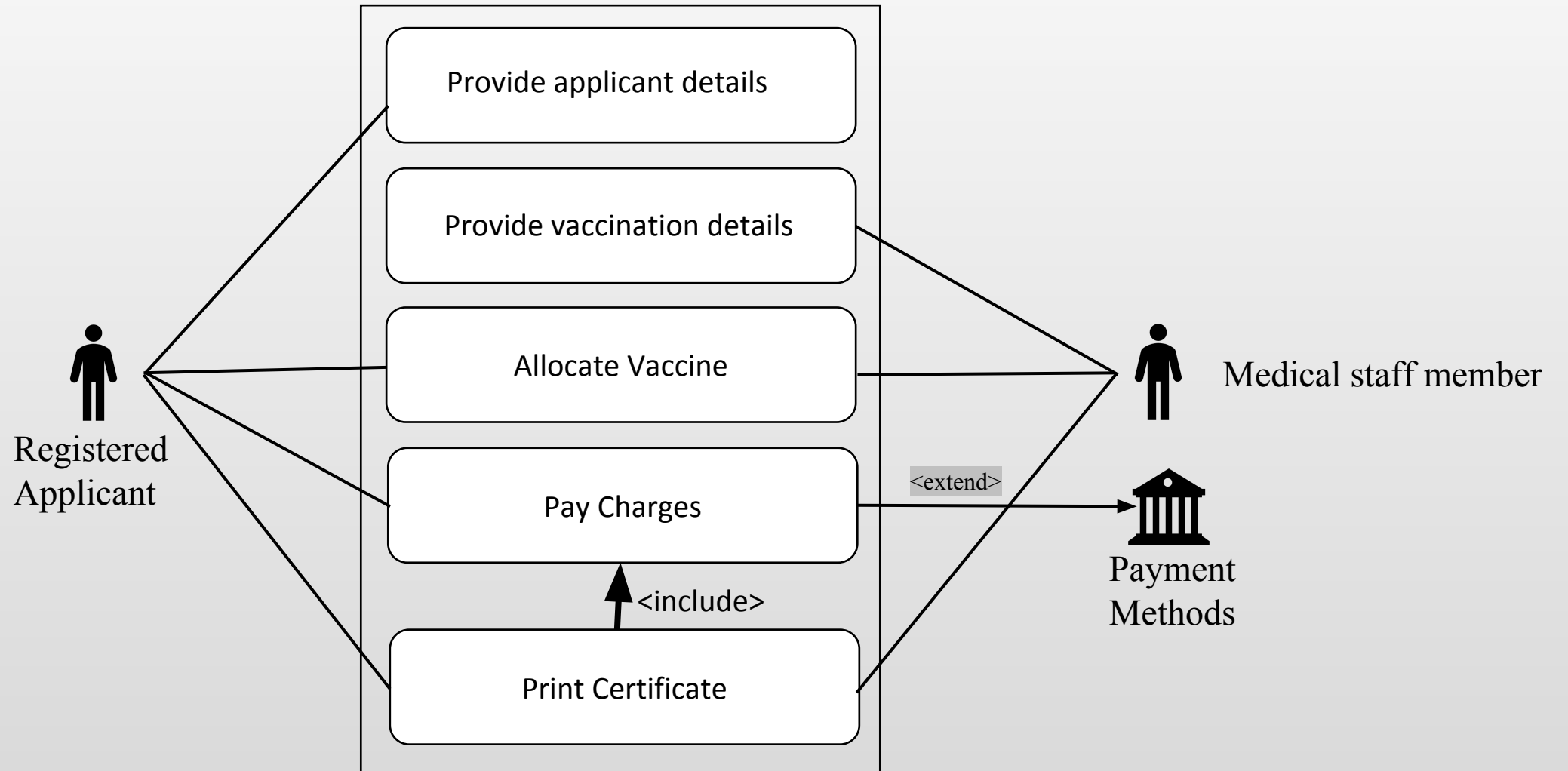| ID and Name	UC-3 Reserve Vaccine		
Created By	Muhamad Nouman	Date Created :	22/10/2022
Primary Actor	Applicant	Secondary Actor:	Medical Staff Member
Description Trigger	Staff Member will have to reserve the vaccination. Vaccination will be reserved.		
Precondition	Applicant must exists in the system.		
Post condition	Vaccination reserved.		
Priority	High		
Normal Flow	**Reserve Vaccine** 1. Staff Member select the vaccine name from the list. 2. System ask for the various names of vaccine. 3. Staff Member select the type of vaccine. 4. System provide the details of vaccine that is available. 5. Staff Member select the vaccine from the list. 6. System asks for the time when vaccine is given. 7. Staff Member provide the time when the vaccine was given. 8. System verifies vaccination. 9. Staff Member acknowledged the vaccine. 10. Vaccination reserved awaited for the applicant.		
Alternate Flow	System failed to reserve the vaccine. 1) Staff Member select the availability of vaccine. 2) System respond with the message that vaccine is reserved. 3) Staff Member select the other vaccines. 4) System respond with the message only one vaccine can be reserved. 5) System asks for the time when the vaccine is given.		

Case User -- 4

ID and Name	UC-4 Pay Charges		
Created By	Hamza Yousaf	Date Created :	22/0/2022
Primary Actor:	Applicant	Secondary Actor:	Medical Staff
Description Trigger	Applicant will have to Pay the certification charges because its compulsory. Payment receipt will be generated for the certificate.		
Precondition	Vaccination should be completed before paying charges.		
Post condition	Payment of certification is confirmed .		
Priority	High		
Normal Flow	**Pay Charges** 1. System will generate the token number. 2. End user select the paying method. 3. Applicant should pay the charges and system will generate him a OTP. 4. Applicant will provide the OTP. 5. System confirms the payment details. 6. System sends the confirmation to the end user.		
Alternate Flow	a Pay charges failed. 1) Enter the card no. for payment. 2) Online transaction will be done. 3) System validate the details. 4) System shows the message that payment is confirmed..		

Case User -- 5

ID and Name:	**UC-5 Print Receipt**		
Created By:	Idrees Mehmood	Date Created :	Date
Primary Actor:	Applicant	Secondary Actor:	Manager
Description: **Trigger:**	Applicant can print the certificate after paying the charges. Request to print the generated certificate.		
Precondition:	Payment of certification should be confirmed.		
Post condition:	Certificate will be printed will be printed.		
Priority:	High		
Normal Flow:	**Print Receipt** 1. Staff request to print certificate. 2. System asks for the Token number.		
	3. End user provided the details. 4. System generated the certificate to print. 5. End use print the certificate.		
Alternate Flow:	*a Print Certificate failed. 1) Staff request for Certificate. 2) System generate the wrong Certificate. 3) Staff again request for the print of Certificate. 4) System generated the certificate with 0 total..		

Use case diagram

Domain Model