Software Requirement Specification (SRS DOCUMENT)

for

Child vaccination and growth tracking system Version 1.0

By

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Revision History

Name	Date	Reason for Changes	Version

Application Evaluation History

Comments (by committee) *include the ones given at scope time both in doc and presentation	Action Taken
From where the data about children's and polio teams	Children data will be taken by my friend's hospital
will be taken.	
Who will be the owner/Stakeholder of the project that	Stakeholders can be government body or any
will manage it?	organization under govt.
Info about vaccines ?	Info about vaccines means details information about vaccine like whats the purpose of this vaccine, why we use this vaccine etc.
Module 5 will be a building a Data Warehouse for DSS?	No, we wont build data warehouse. We will not have that much data for a data warehouse.
Where is the use of AI?	AI is used in future prediction models

Supervised by

Dr. Ashfaq Hussain Farooqi

Signature)	

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1. Introduction

This document is about all the specification of requirements in detail for our project "Child immuinization and growth tracker". In start, purpose and scope of our project is defined that how is beneficial. Then overall description will briefly describe the whole idea of the project. After that Usecases diagrams are used to explain each actor and its features. Next are the definition of these diagrams in details. In that tabular usecases all the details will be mentioned. After that functional and non-functional requirements are mentioned. Audience is defined after that we'll conclude the whole document.

1.1 Purpose

Child immunization and growth tracker will be a system that will automate the existing immunization system of Pakistan. Apart from that, it can help parents to monitor their child growth. This system has 4 major parts i.e. Child Vaccination management, Vaccine stock management, Predictions regarding cases and stock and child growth tracking. It will help the authorities to track and eradicate the diseases like polio, TB etc. Also, it will help parents to check their child is growing properly or not.

1.2 Scope and Modules

Child immunization and growth tracker will automate the existing manual immunization system and it will help authorities to control the spreadness of diseases which are eradiated in all over the world. Apart from that, it will help authorities to manage their stock efficiently so there wont be shortage of vaccines anytime. Parent will also get benefit using this system. They can monitor their child growth. System will be composed of web and mobile application.

1.2.1 Modules

a. Module 1: Centralizing and Tracking Child Record

This is the module in which child data will be inserted into the system. Then system will produce two printable. i.e., birth certificate and schedule of vaccination.

Then whole vaccination schedule will be sent to user via SMS. System will auto generate a reminder before one day of the upcoming vaccination. When the parents will come to any hospital or vaccination center, sub-admin will search child by parent or child id and after vaccination they will update the status of that vaccine. To ensure the activity of the worker, a confirmation code will be sent to parent via SMS. After confirming the status of the vaccine will be updated. System will also keep check if the child did not get vaccinated, parent will get reminder on SMS.

Sub-admin (hospital) can update the incoming stock of vaccine and he can request vaccination center or admin for stock.

b. Module 2: Vaccine Center Management:

This module is tackling vaccine related things. Sub-admin (vaccine center) will insert vaccine stock information. Then on the basis of need this stock will be allocated to different hospitals or areas by the sub-admin. Sub-admin can use the system which can predict the upcoming requirements of stock based on past data or birth rate using a customized prediction model.

Sub-admin can make new campaigns and these campaigns can be overview by admin too. Sub-admin can allocate workers, vaccine stock to the campaign. Apart from that, registered parents will get notified by SMS through the system.

c. Module 3: User Management

This is a mobile based module which is going to be handled by end users i.e. Polio worker and parents. Our system will provide them the data of the children born in the allocated area. Polio worker will visit, and they will follow the same procedure of doing vaccination through our system. Other part of this system is for the parents. This feature is providing record of their children through an app. In this application, they can view their children vaccination status. They can download vaccination completion certificate. Also, this feature will educate parents about vaccination through blogs and stats.

d. Module 4: Polio Vaccine Management

This is mobile based module for polio vaccine workers and vaccination. Workers will be allotted their areas, and number of children who has to be vaccinated during the campaign. Workers will visit those specific areas and will do the vaccination of children. After vaccination, workers will take additional data from the parents regarding polio symptoms. On the basis of data provided by parents, System will process the data and will let know the parents about the possibility of polio. Same feature will be present in parents application too where they can add this additional information time to time and system can let them know If their children has any symptom regarding polio. Polio workers will be able to send report regarding vaccinated ,unvaccinated children and possible polio symptomatic children on daily basis.

e. Module 5: Growth Tracking

In this module, parents will add their child information and the system will go through prediction model. This feature will take data of Children from 0-8 year. Upon their data submission, our system will predict the growth of their children. This data will be kept in the app and system will ask parents to update current information of child. Then on conclusion of previous record system will suggest specific diet and things which child has deficiency. This will help the parents to keep check on their child growth.

f. Module 6: Decision Support System

This module will provide stats that will be shown to admin in the form of graph and numbers. These stats will be based on city, area, and province. These stats include how much children born, how much vaccinations used, how many children get vaccinated and how many were left.

Another feature of this module is the prediction of cases based on the past data. In this feature, system will use the present and past data of children and cases. And on the basis of these stats, system will predict future possible cases. These predictions will be based on cities and areas. This module will also keep check on the stock requirements in the same way discussed in the vaccine center module.

2. Overall Description

This section presents the overall description of the targeted project.

2.1 Product Perspective

Child immuinization and growth tracker is a web and mobile application. This system is available at government level in Canada but not present In Pakistan. We are also enhancing by providing prediction assistance using machine learning. Current manual system is not able to track those cases who are not getting vaccinated. Nor they can manage the vaccine stock properly. So, our system will provide assistance in overcoming all these problems.

2.2 Operating Environment

- **OE-1:** The system shall operate on both IOS and Android
- **OE-2:** The system shall operate on website

2.3 Design and Implementation Constraints

Following design and implementation constraints are involved in this project:

- CO-1: Python language shall be used for prediction models
- CO-2: React Js will be used for web user interfaces
- CO-3: React Native shall be used for designing mobile user interface.
- CO-4: Node.js, Express Js shall be used for server-side implementation.
- CO-5: Mongo DB shall be used as the NoSQL Database required for storing and maintaining user records.

3. Requirement Identifying Technique

3.1 Use Case Diagram

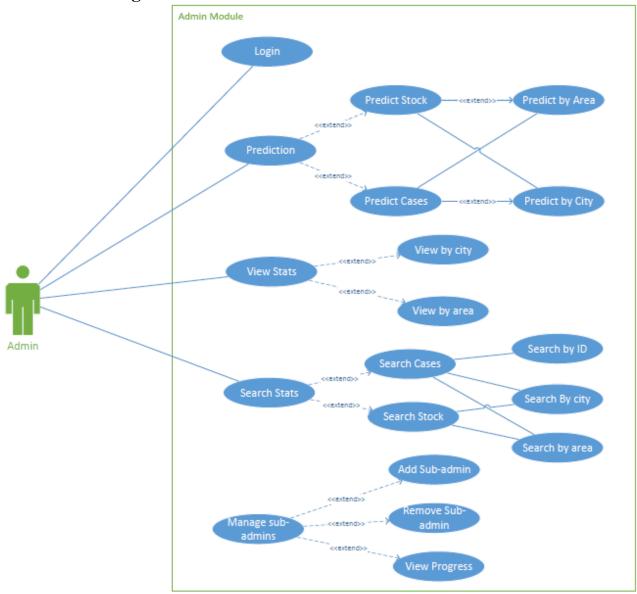


Figure 1: Usecase-Admin

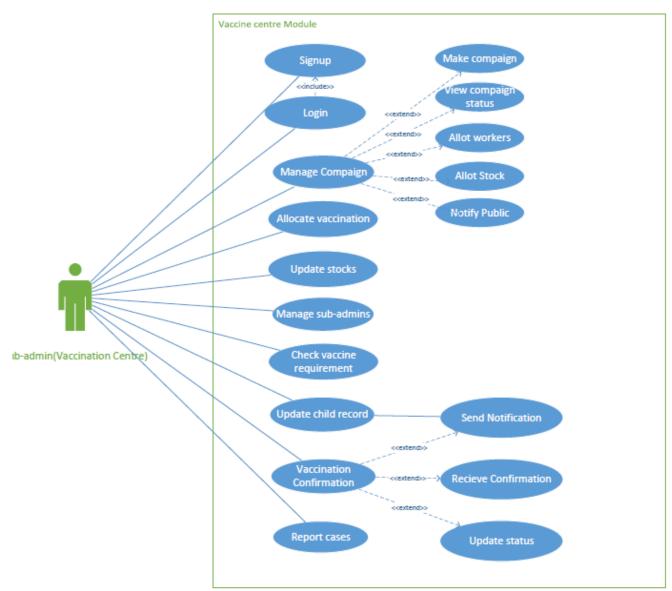


Figure 2: Usecase Sub-admin(Vaccination centre)

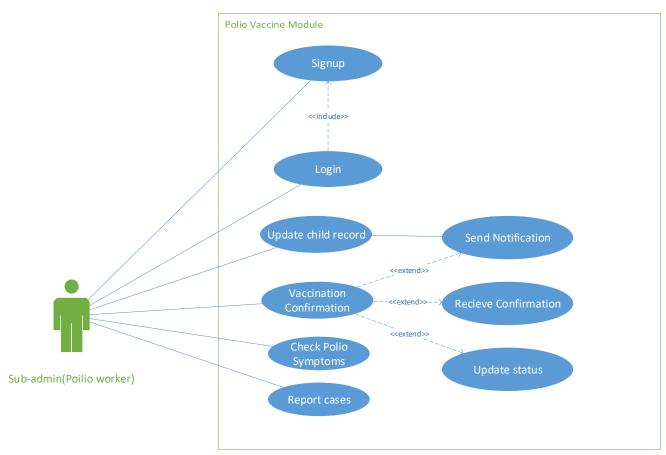


Figure 3:Usecase Sub-admin(Polio worker)

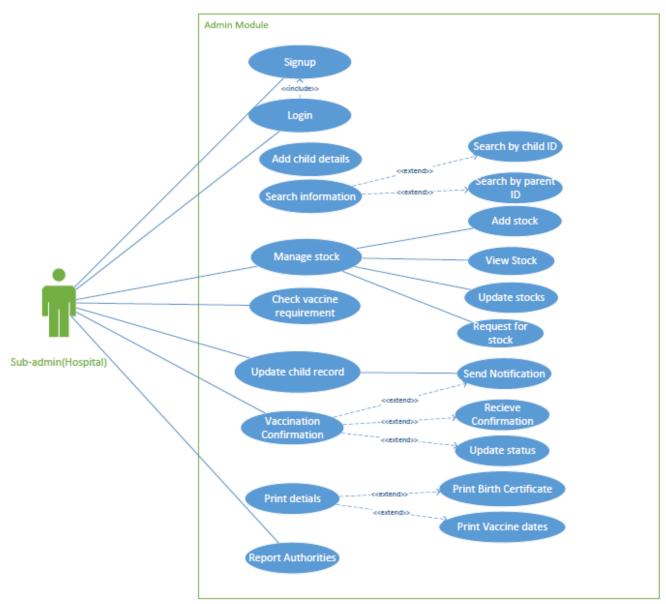


Figure 4:Usecase Sub-admin(Hospital)

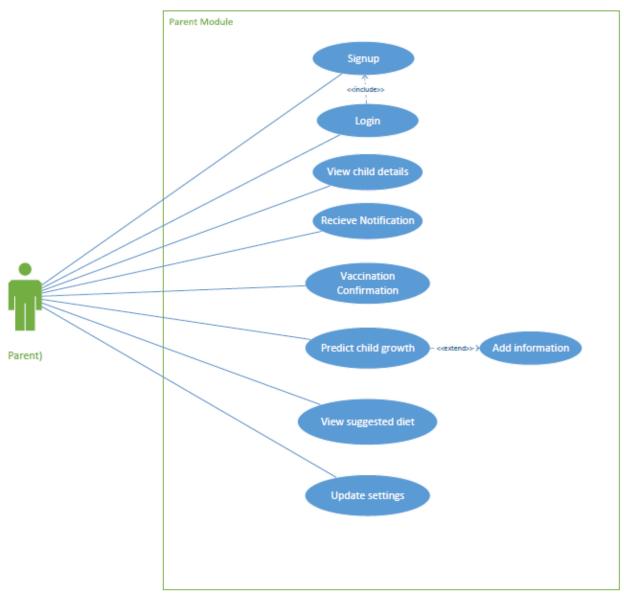


Figure 5:Usecase Sub-admin(Parent)

3.2 Use Case Description

scription
UC-1
Login on Web app
Primary Actor: Admin, Hospital, Vaccine Center
The user will be able to login and use the application.
A User will click on "Sign in" to go to the sign in page.
PRE-1. User has already accessed to the web page
PRE-2- User already have an account
POST-1.User will be given access to fill from to login.
1. User will type the web URL.
2. User will have option to Log in or Sign up option.
3. User will click on "log in" option.
4. User will select login as admin.
5. The form will be filled by user.
6. User will be logged in to the dashboard.
DT/A
N/A
1 TC
1. If actor does not fill the required fields.
Prompt message will be shown to user to fill in required fields.
N/A
1. User should be able to access website.
2. User should have registered account.

Table 1: Textual Description of Admin login

Use Case ID:	UC-2
Use Case Name:	Prediction
Actors:	Primary Actor: Admin
Description:	The admin will open the web application and will select the future prediction
	option.
Trigger:	A User will click on Prediction from the dashboard.
Preconditions:	PRE-1. User has already accessed to the web page
	PRE-2- User must be logged in as admin
Post conditions:	POST-1.User will be given access to the prediction screen.
Normal Flow:	
	1. User will log in to the web application.
	2. User will click on future prediction.
	3. Another screen will be displayed on screen asking the user to choose
	between stock prediction and future cases prediction.
Alternative	N/A
Flows:	
Exceptions:	N/A
Business Rules	N/A
Assumptions:	1. User should be able to access website.
	2. User must be logged in as admin.

Table 2: Textual Description of prediction

Use Case ID:	UC-3
Use Case Name:	Predict Stock
Actors:	Primary Actor: Admin
Description:	The admin will select the future prediction option and then will click on Stock Prediction.
Trigger:	A User will click on Stock Prediction from the prediction screen.
Preconditions:	PRE-1. User has already accessed to the web page
	PRE-2- User must be logged in as admin
Post conditions:	POST-1.User will be given access to the stock prediction screen.
Normal Flow:	 User will log in to the web application. User will click on future prediction. Another screen will be displayed on screen asking the user to choose between stock prediction and future cases prediction. User will click on stock prediction.
Alternative	N/A
Flows:	
Exceptions:	N/A
Business Rules	N/A
Assumptions:	1. User should be able to access website.
	2. User must be logged in as admin.

Table 3: Textual Description of stock prediction

Use Case ID:	UC-4	
Use Case Name:	Predict Stock by area/city	
Actors:	Primary Actor: Admin	
Description:	The admin will select the future prediction option and then will click on Stock	
	Prediction and will select either by area or by city	
Trigger:	A User will click on Stock Prediction from the prediction screen.	
Preconditions:	PRE-1. User has already accessed to the web page	
	PRE-2- User must be logged in as admin	
Post conditions:	POST-1.User will be given access to the stock prediction screen.	
Normal Flow:	 User will log in to the web application. User will click on future prediction. Another screen will be displayed on screen asking the user to choose between stock prediction and future cases prediction. User will click on stock prediction. User will select predict stock by city or by area to see the prediction. 	
Alternative Flows:	N/A	
Exceptions:	N/A	
_	"	
Business Rules	N/A	
Assumptions:	1. User should be able to access website.	
	2. User must be logged in as admin.	

Table 4: Textual Description of stock prediction by area/city.

Use Case ID:	UC-5
Use Case Name:	Predict Cases
Actors:	Primary Actor: Admin
Description:	The admin will select the future prediction option and then will click on Cases
	Prediction.
Trigger:	A User will click on Cases Prediction from the prediction screen.
Preconditions:	PRE-1. User has already accessed to the web page
	PRE-2- User must be logged in as admin
Post conditions:	POST-1.User will be given access to the cases prediction screen.
Normal Flow:	
	1. User will log in to the web application.
	2. User will click on future prediction.
	3. Another screen will be displayed on screen asking the user to choose
	between stock prediction and future cases prediction.
	4. User will click on future case prediction.
Alternative	N/A
Flows:	
Exceptions:	N/A
Business Rules	N/A
Assumptions:	1. User should be able to access website.
	2. User must be logged in as admin.

Table 5: Textual Description of cases prediction

Use Case ID:	UC-6
Use Case Name:	Predict future cases by area/city
Actors:	Primary Actor: Admin
Description:	The admin will select the future prediction option and then will click on future cases Prediction and will select either by area or by city
Trigger:	A User will click on future cases Prediction from the prediction screen.
Preconditions:	PRE-1. User has already accessed to the web page PRE-2- User must be logged in as admin
Post conditions:	POST-1.User will be given access to the future cases prediction screen.
Normal Flow:	 User will log in to the web application. User will click on future prediction. Another screen will be displayed on screen asking the user to choose between stock prediction and future cases prediction. User will click on future case prediction. User will select predict future cases by city or by area to see the prediction.
Alternative Flows:	N/A
Exceptions:	N/A
Business Rules	N/A
Assumptions:	 User should be able to access website. User must be logged in as admin.

Table 6: Textual Description of case prediction by area/city

Use Case ID:	UC-7
Use Case Name:	View Stats
Actors:	Primary Actor: Admin
Description:	The admin will select view stats from the navbar
Trigger:	A User will click on view stats from navbar
Preconditions:	PRE-1. User has already accessed to the web page
	PRE-2- User must be logged in as admin
Post conditions:	POST-1.User will be given access to the statistics screen.
Normal Flow:	
	1. User will log in to the web application.
	2. User will click on statistics.
	3. Another screen will be displayed on screen where country stats will be
	show and asking the user to choose between city stats or area stats
Alternative	Whole country stats will already be displayed on dashboard from where you
Flows:	can also view stats.
Exceptions:	Stats will not be shown if there is no data available
Business Rules	N/A
Assumptions:	1. User should be able to access website.
	2. User must be logged in as admin.

Table 7: Textual Description of view statistics

Use Case ID:	UC-8
Use Case Name:	View Stats by city/area
Actors:	Primary Actor: Admin
Description:	The admin will select view stats by city or by area from the statistics screen.
Trigger:	A User will click on view stats from navbar
Preconditions:	PRE-1. User has already accessed to the web page
	PRE-2- User must be logged in as admin
Post conditions:	POST-1.User will be given access to the statistics screen where statistics will
	be shown.
Normal Flow:	
	1. User will log in to the web application.
	2. User will click on statistics.
	3. Another screen will be displayed on screen where country stats will be
	show and asking the user to choose between city stats or area stats.
	4. User will select either city wise or area wise from the screen.
Alternative	Whole country stats will already be displayed on dashboard from where you
Flows:	can also view stats.
Exceptions:	User must not select area where our system is not available.
•	
Business Rules	N/A
Dusiness Kules	IV/A
Assumptions:	1. User should be able to access website.
	2. User must be logged in as admin.

Table 8: Textual Description of statistics by city/area

Use Case ID:	UC-9
Use Case Name:	Search Stats
Actors:	Primary Actor: Admin
Description:	The admin will select search stats from the statistics screen
Trigger:	A User will click on search stats
Preconditions:	PRE-1. User has already accessed to the web page
	PRE-2- User must be logged in as admin
Post conditions:	POST-1.User will be given access to the search statistics screen where you will
	search stats
Normal Flow:	
	1. User will log in to the web application.
	2. User will click on statistics.
	3. Statistics screen will be displayed where you can search stats
Alternative	Whole country stats will already be displayed on dashboard user can also
Flows:	search stats from there.
Exceptions:	User must not search area where our system is not available.
Business Rules	N/A
Assumptions:	1. User should be able to access website.
	2. User must be logged in as admin.

Table 9: Textual Description of search statistics

Use Case ID:	UC-10
Use Case Name:	Search cases or stock info
Actors:	Primary Actor: Admin
Description:	The admin will select search stats from the statistics screen
Trigger:	A User will click on search stats
Preconditions:	PRE-1. User has already accessed to the web page
	PRE-2- User must be logged in as admin
Post conditions:	POST-1.User will be given access to the search statistics screen where user
	will search stats
Normal Flow:	
	1. User will log in to the web application.
	2. User will click on statistics.
	3. Statistics screen will be displayed where you can search stats
	4. User will search cases stats or stock info.
Alternative	Whole country stats will already be displayed on dashboard you can also
Flows:	search from there.
Exceptions:	User must not search area where our system is not available.
Business Rules	N/A
Assumptions:	1. User should be able to access website.
_	2. User must be logged in as admin.

Table 10: Textual Description of search cases or stock statistics

UC-11
Search child info
Primary Actor: Admin
The admin will select search child info from the statistics screen
A User will click on search child info
PRE-1. User has already accessed to the web page
PRE-2- User must be logged in as admin
POST-1.User will be given access to the search statistics screen where user
will search child info
1. User will log in to the web application.
2. User will click on statistics.
3. Statistics screen will be displayed where you can search stats
4. User will select search child info.
5. User will enter child ID to see his info
User can also select search child info from navbar
User must not search child whose ID is invalid.
N/A
1. User should be able to access website.
2. User must be logged in as admin.

Table 11: Textual Description of search specific child stats

Use Case ID:	UC-12
Use Case Name:	Manage sub admins
Actors:	Primary Actor: Admin, Polio center
Description:	The admin will select manage sub admins from the navbar
Trigger:	A User will click on manage sub admins
Preconditions:	PRE-1. User has already accessed to the web page
	PRE-2- User must be logged in as admin
Post conditions:	POST-1.User will be given access to the manage sub admins screen where all
	the admins will be shown
Normal Flow:	
	1. User will log in to the web application.
	2. User will click on manage sub admins
	3. Statistics screen will be displayed where user will add, remove sub
	admin or view progress.
Alternative	N/A
Flows:	
Exceptions:	User must not be able to manage sub-admins who are not registered.
Business Rules	N/A
Assumptions:	1. User should be able to access website.
	2. User must be logged in as admin.

Table 12: Textual Description of manage sub admins

Tabular use cases for Parent:

Use Case ID:	UC-13
Use Case Name:	Sign up from mobile app
Actors:	Primary Actor: Parent, Polio Worker Secondary Actor: Admin
Description:	The user will be able to Register account and use the application.
Trigger:	A User will click on "Sign up" to start registering.
Preconditions:	PRE-1. User has already downloaded the application
Post conditions:	POST-1.User will be given access to fill from to register account.
Normal Flow:	
	1. User will download application.
	2. User will have option to Log in or Sign up option.
	3. User will click on "sign up" option.
	4. User will select sign up as parent/polio worker.
	5. The form will be filled by user.
	6. User will be registered.
Alternative	N/A
Flows:	
Exceptions:	1. If actor does not fill the required fields.
	Prompt message will be shown to user to fill in required fields.
Business Rules	N/A
Assumptions:	1. User should be downloaded the application
	2. User should have and email account and phone no.

Table 13: Textual Description of mobile sign up

Use Case ID:	UC-14
Use Case Name:	Sign in from mobile app
Actors:	Primary Actor: Parent, Polio Worker Secondary Actor: Admin
Description:	The user will be able to login and use the application.
Trigger:	A User will click on "Sign in" to go to the landing page.
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will be given access to the landing page
Normal Flow:	
	1. User will download application.
	2. User will have option to Log in or Sign up option.
	3. User will click on "sign in" option.
	4. User will the form with email and password.
	5. User will be logged in to the landing page.
Alternative	N/A
Flows:	
Exceptions:	1. If actor does not fill the required fields.
	Prompt message will be shown to user to fill in required fields.
Business Rules	N/A
Assumptions:	1. User must be registered.

Table 14: Textual Description of mobile sign in

Use Case ID:	V15
Use Case Name:	View child info
Actors:	Primary Actor: Parent Secondary Actor: Admin
Description:	The user will be able to see his child info
Trigger:	A User will click on see child info from the landing page.
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will be given access to the child info screen where he will enter his ID
Normal Flow:	 User will click in check child info. User will enter his child ID which is written on birth certificate. User will see his child details
Alternative Flows:	N/A
Exceptions:	1. If his child is not registered in our system, details will not be shown.
Business Rules	N/A
Assumptions:	 User must be registered. Child must also be registered in our system.

Table 15: Textual Description of View child info

Use Case ID:	UC-16
Use Case Name:	Vaccination Confirmation
Actors:	Primary Actor: Parent
Description:	The user will be able to confirm his child vaccination
Trigger:	A User will receive notification which he will confirm.
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will confirm his child vaccination
Normal Flow:	 User will receive notification of his child vaccination. User will confirm it,
Alternative Flows:	N/A
Exceptions:	1. If his child is not registered in our system, no notification will be received.
Business Rules	N/A
Assumptions:	 User must be registered. Child must also be registered in our system.

Table 16: Textual Description of Vaccination confirmation

Use Case ID:	UC-17
Use Case Name:	Check child growth
Actors:	Primary Actor: Parent
Description:	The user will be able to check his child growth.
Trigger:	A User will click on check child growth
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will be accessed to the growth checking screen where he will enter his child details.
Normal Flow:	 User will click on check child growth. User will enter his child details like height, weight etc. User will click on submit. User will see his child growth.
Alternative Flows:	N/A
Exceptions:	N/A
Business Rules	N/A
Assumptions:	1. User must be registered.

Table 17: Textual Description of check child growth

Use Case ID:	UC-18
Use Case Name:	View diet plans
Actors:	Primary Actor: Parent
Description:	The user will be able to check his child growth and then view the diet plan
	according to the growth.
Trigger:	A User will click on see suggested diet.
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will be accessed to the growth checking screen where he will
	enter his child details and then see diet plans.
Normal Flow:	
	1. User will click on check child growth.
	2. User will enter his child details like height, weight etc.
	3. User will click on submit.
	4. User will see his child growth.
	5. User will click on see suggested diet.
	6. Suggested diet will be displayed.
Alternative	N/A
Flows:	
Exceptions:	N/A
Business Rules	N/A
Assumptions:	User must be registered.

Table 18: Textual Description of see diet plans

Use Case ID:	UC-19
Use Case Name:	Update settings
Actors:	Primary Actor: Parent
Description:	The user will be able to update his settings.
Trigger:	A User will click on settings.
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will be accessed to the settings screen
Normal Flow:	 User will click on settings. User will update his settings i.e change profile pic, change password etc.
Alternative Flows:	N/A
Exceptions:	N/A
Business Rules	N/A
Assumptions:	1. User must be registered.

Table 19: Textual Description of update profiles

Use cases of Polio Worker:

Use Case ID:	UC-20
Use Case Name:	Update child record
Actors:	Primary Actor: Polio Worker
Description:	The user will be able to update child record whose vaccination is done.
Trigger:	A User will click on update child record.
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will be able to update child vaccination data
Normal Flow:	 User will click on update child data User will enter updated vaccines info. Notification will be sent to parent Parent will confirm it. Data will be updated.
Alternative	N/A
Flows:	
Exceptions:	N/A
Business Rules	N/A
Assumptions:	1. User must be registered.

Table 20: Textual Description of update child data

Use Case ID:	UC-21
Use Case Name:	Report cases
Actors:	Primary Actor: Polio Worker
Description:	The user will be able to report authorities about polio cases.
Trigger:	A User will click on report authorities.
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will be able to send data to authorities i.e admin
Normal Flow:	 User will click on report authorities User will click on send report A report will be sent to authorities.
Alternative Flows:	N/A
Exceptions:	N/A
Business Rules	N/A
Assumptions:	1. User must be registered.

Table 21: Textual Description of report authorities

Use Case ID:	UC-22
Use Case Name:	Check Polio symptoms
Actors:	Primary Actor: Polio Worker Secondary Actor: Parent
Description:	This will help workers to check Polio symptoms on regular basis
Trigger:	A User will click on check polio symptoms
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will be able to get results on polio symptoms
Normal Flow:	Polio Worker will click on Check polio symptoms Polio worker will add additional information taken from parents Polio worker will click on check and results will display
Alternative Flows:	N/A
Exceptions:	N/A
Business Rules	N/A
Assumptions:	2. User must be registered.

Table 22: Textual Description of report authorities

Tabular Use cases for Hospital:

UC-23
Signup
Primary Actor: Sub-admin(Hospital)
The user will be able to Register account and use the application.
A User will click on "Sign up" to start registering.
High
PRE-1. User has already accessed to the web page
POST-1.User will be given access to fill from to register account.
 User will type the web URL User will have option to Log in or Sign up option. User will click on "sign up" as hospital. User will select sign up as hospital. The form will be filled by user. User will be registered.
N/A
If actor does not fill the required fields. Prompt message will be shown to user to fill in required fields.
N/A
1. User should be able to access website.
2. User should have and email account and phone no.

Table 23:Textual Description of hospital sign up

Use Case ID:	UC-24
Use Case Name:	Sign in as hospital
Actors:	Primary Actor: Sub-admin(Hospital)
Description:	The user will be able to login and use the application.
Trigger:	A User will click on "Sign in" to go to the landing page.
Level	High
Preconditions:	PRE-1. User has already signed up to the application
Post conditions:	POST-1.User will be given access to fill from to register account.
Normal Flow:	
	1. User will type the web URL or download application.
	2. User will have option to Log in or Sign up option.
	3. User will click on "sign in" option.
	4. User will the form with email and password.
	5. User will be logged in to the landing page.
Alternative	N/A
Flows:	
Exceptions:	1. If actor does not fill the required fields.
	Prompt message will be shown to user to fill in required fields.
Business Rules	N/A
Assumptions:	1. Sub-admin must be registered.

Table 24: Textual Description of hospital sign in

Use Case ID:	UC-25
Use Case Name:	Add child
Actors:	Primary Actor: Sub-admin(Hospital)
Description:	User will add all basic information of parent and child
Trigger:	A user will click on the add child
Level	High
Preconditions:	PRE-1. User has already signed in to the application
Post conditions:	POST-1.User will be able to add a new born child information in the system
Normal Flow:	 User will login his account. User will click on add child. User will fill all the necessary details of parent and child. User will click on submit. User will see the information and code assigned to new baby.
Alternative Flows:	N/A
Exceptions:	If actor doesnot fill the required fields. Prompt message will be shown to user to fill in required fields.
Business Rules	N/A
Assumptions:	 User must be registered. Child must be a new born baby

Table 25: Textual Description of add child

Use Case ID:	UC-26
Use Case Name:	Search child
	7.
Actors:	Primary Actor: Sub-admin(Hospital)
Description:	User will type child name or id and his information will be shown. It will help
	user to see and update the child record of vaccine.
Trigger:	A user will click on the add child
Level	High
Preconditions:	PRE-1. User has already signed in to the application
Post conditions:	POST-1.User will be able to view and update the existing child information in
	the system
Normal Flow:	
TOTHER TOWN	1. User will login his account.
	2. User will add id of child in search tab.
	3. User will click on search button.
	4. Child data will appear and user can see the child information
	5. User can select child and update its vaccine information
Alternative	User can also search the child through parent id
Flows:	If parent have multiple child, user can see, select and update it
Exceptions:	1. If actor does not fill the required fields.
•	Prompt message will be shown to user to fill in required fields.
D 1 D 1	
Business Rules	N/A
Assumptions:	1. User must be registered.
•	2. Child must be a new born baby
	3. Child must be registered before
	2. 2

Table 26: Textual Description of search child

Use Case ID:	UC-27
-	
Use Case Name:	Manage stock (Add or request)
Actors:	Primary Actor: Sub-admin(Hospital), Vaccine center
Description:	User will be able to add or request for vaccine stock to the admin
Trigger:	A user will click on the manage stock
Level	High
Preconditions:	PRE-1. User has already signed in to the application
Post conditions:	POST-1.User will be able to add a new born child information in the system
Normal Flow:	 User will login his account. User will click on manage stock and will see multiple options there. User will click on the add stock which will be allotted by vaccine center. User will click on add stock and stock will be shown in the record. User can also request for stock to vaccine center or admin
Alternative Flows:	N/A
Exceptions:	 If actor does not fill the required fields. Prompt message will be shown to user to fill in required fields. if stock is not allotted then you can't add
Business Rules	 Stock must be allotted by vaccine center before and its expiry and manufacturing dates should be clearly mentioned This is only valid for the new vaccines like corona etc, for existing vaccines user can only use update information
Assumptions:	 User must be registered. Vaccines are allotted by admin User is adding new vaccines in the system

Table 27: Textual Description of manage stock

Use Case ID:	UC-28
Use Case Name:	Manage stock (View or update)
Actors:	Primary Actor: Sub-admin(Hospital), Vaccine center
Description:	User will be able to view or update the existing vaccines record
Trigger:	A user will click on the manage stock
Level	High
Preconditions:	PRE-1. User has already signed in to the application
	PRE-2. Vaccines are already existing in the system
Post conditions:	POST-1.User will be able to view or update the existing vaccine stock
Normal Flow:	
	1. User will login his account.
	2. User will click on manage stock and will see multiple options there.
	3. User will click on the view stock and multiple vaccines will be shown there
	4. User will click on the specific vaccine which need upgradation
	5. User will add new stock information
	6. User will click on update stock and stock will be updated
	7. User will see the updated stock.
Alternative	Same process can be followed in the vaccine center
Flows:	
Exceptions:	1. If actor does not fill the required fields.
	Prompt message will be shown to user to fill in required fields.
	2. if stock is not allotted then you can't update
Business Rules	1. Stock must be allotted by vaccine center before and its expiry and
	manufacturing dates should be clearly mentioned
	2. This is only valid for the existing vaccines.
Assumptions:	1. User must be registered.
	2. Vaccines are allotted by admin.
	3. User is updating new vaccines.

Table 28: Textual Description of manage stock

Use Case ID:	UC-29
Use Case Name:	Check vaccine requirements
Actors:	Primary Actor: Sub-admin(Hospital), Vaccine center
Description:	This is an algorithm based feature which will help the admins to check the
	upcoming requirement of vaccine in a particular area or hospital
Trigger:	A user will click check upcoming requirement button
Level	High
Preconditions:	PRE-1. All details of new born child and vaccine are already entered in the
	system
Postconditions:	POST-1.User will be able to view the upcomiong vaccine stock requirment
Normal Flow:	
	1. User will login his account.
	2. User will click on check upcoming requirements of vaccine
	3. System at backend will work and check how many children belongs to this
	area.
	4. On this information, system will tell the upcoming requirements of vaccine
	5. User will be able to see this
	6. User can request to admin for this requirement.
Alternative	Same process can be followed in the vaccine center
Flows:	
Exceptions:	N/A
_	
Business Rules	This is only valid for the existing vaccines.
	·
Assumptions:	User must be registered.
	Vaccines are allotted by admin.

Table 29: Textual Description of vaccine requirements

Use Case ID:	UC-30
Use Case Name:	Print details
Actors:	Primary Actor: Sub-admin(Hospital)
Description:	Through this feature hospital can give birth certificate and vaccination codes
	to parents
Trigger:	A user will click print details
Level	High
Preconditions:	PRE-1. All details of new born child is already entered in the system
Post conditions:	POST-1.User will be able to provide the birth certificate or vaccine details
Normal Flow:	
	1. User will login his account.
	2. User will click on print details
	3. User can click on print birth certificate
	4. A birth certificate will be provided to the end user(Parent).
	5. User can click on print vaccine details
	6. Vaccine details will be provided to the end user(Parent).
Alternative Flows:	User can use control + p to print both things
Exceptions:	N/A
Business Rules	N/A
Assumptions:	User must be registered.

Table 30: Textual Description of birth certificate

Tabular use cases of Vaccine center, Polio center:

Use Case ID:	UC-31
Use Case Name:	Manage campaign (Make)
Actors:	Primary Actor: Vaccine center, Polio center
Description:	User will be able to make new vaccine campaigns time to time
Trigger:	A user will click on the manage campaigns
Level	High
Preconditions:	PRE-1. User has already signed in to the application
	PRE-2. User is authorized by admin to make these campaigns
Post conditions:	POST-1.User will be able to make a new campaign of vaccine for general
	public
Normal Flow:	
	1. User will login his account.
	2. User will click on manage campaign.
	3. User will click on make new campaign.
	4. User will add details like area, starting and ending dates etc
	5. User will click on make campaign
Alternative	N/A
Flows:	
Exceptions:	1. If actor does not fill the required fields.
	Prompt message will be shown to user to fill in required fields.
Business Rules	N/A
Assumptions:	User must be registered.
_	Vaccines are allotted by admin
	User is authorized by Admin

Table 31: Textual Description of manage campaigns

Use Case ID:	UC-32
Use Case Name:	Manage campaign (View)
Actors:	Primary Actor: Vaccine center, Polio center
Description:	User will be able to view existing vaccine campaigns.
Trigger:	A user will click on the manage campaigns
Level	High
Preconditions:	PRE-1. User has already signed in to the application
	PRE-2. User is authorized by admin to make these campaigns
Post conditions:	POST-1.User will be able to see the status of existing vaccine campaigns
Normal Flow:	
	1. User will login his account.
	2. User will click on manage campaign.
	3. User will click View campaigns
	4. User will be able to see the status of campaigns running
Alternative	N/A
Flows:	
Exceptions:	1. If actor does not fill the required fields.
-	Prompt message will be shown to user to fill in required fields.
Business Rules	N/A
Assumptions:	User must be registered.
	Vaccines are allotted by admin
	User is authorized by Admin

Table 32: Textual Description of view campaigns

Use Case ID:	UC-33
Use Case Name:	Manage campaign (Allotment)
Actors:	Primary Actor: Vaccine center, Polio center
Description:	User will be able to Allot workers and vaccine stock to the campaigns
Trigger:	A user will click on the manage campaigns
Level	High
Preconditions:	PRE-1. User has already signed in to the application
	PRE-2. User is authorized by admin to manage these campaigns
Post conditions:	POST-1.Workers are allotted the area and stock of vaccines
Normal Flow:	
	1. User will login his account.
	2. User will click on manage campaign.
	3. User will click on the running campaigns
	4. User will click on allotment
	5. User will allot workers and vaccine stock to the campaigns
	6. User will click on the update.
Alternative	Same procedure can be done while making campaigns
Flows:	
Exceptions:	1. If actor does not fill the required fields.
_	Prompt message will be shown to user to fill in required fields.
	2. User is not authenticated
Business Rules	N/A
Assumptions:	N/A

Table 33: Textual Description of allot vaccines

Use Case ID:	UC-34
Use Case Name:	
	Manage campaign (Notify)
Actors:	Primary Actor: Vaccine center, Polio center
Description:	This feature is to notify the public via sms about the vaccine campaigns so that
	they can get their children vaccinated
Trigger:	A user will click on the notify public
Level	High
Preconditions:	PRE-1. User has already signed in to the application
	PRE-2. User is authorized by admin to manage campaigns
Post conditions:	POST-1.Parents will receive sms notification about campaigns
Normal Flow:	
	1. User will login his account.
	2. User will click on manage campaign.
	3. User will click on the running campaigns
	4. User will click on notify public.
	5. System will send notification to the end users.
Alternative	Same procedure can be done while making campaigns
Flows:	
Exceptions:	1. User is not authenticated
•	2. Correct contact numbers are not provided
Business Rules	N/A
Assumptions:	N/A

Table 34: Textual Description of campaign notifications

Use Case ID:	UC-35
Use Case Name:	Allocate stock
Actors:	Primary Actor: Vaccine center, Polio center
Description:	User will be able to allot vaccination stock to the sub admins
Trigger:	A user will click allot stock button
Level	High
Preconditions:	PRE-1. User has already signed in to the application
	PRE-2. User is authorized by admin to allot these vaccine stock
Post conditions:	POST-1.Sub-admins are allotted stock of vaccines
Normal Flow:	1. User will login his account.
	2. User will click allot stock
	3. User will fill the details and stock will be allotted
	4. User will click on allot and sub-admins can see the allotted stock
Alternative Flows:	N/A
Exceptions:	 If actor doesnot fill the required fields. Prompt message will be shown to user to fill in required fields. User is not authenticated
Business Rules	N/A
Assumptions:	N/A

Table 35: Textual Description of allot stocks

Use Case ID:	UC-36
Use Case Name:	Report cases
Actors:	Primary Actor: Vaccine center, Polio center
Description:	User will be able report the cases to admins which got unvaccinated
Trigger:	A user will click on the report to admin button
Level	High
Preconditions:	PRE-1. User has already signed in to the application
	Pre-2. Parents has been notified many times
Post conditions:	POST-1.Admin will get the data of such child who didn't got vaccinated
Normal Flow:	 User will login his account. User will click on report to admin A system generated report will appear in front of user User will click on report.
Alternative Flows:	N/A
Exceptions:	N/A
Business Rules	N/A
Assumptions:	N/A

Table 36: Textual Description of report case

4. Functional Requirements

Functional Requirements of Admin:

Table 1: Description of FR-1

Identifier	FR-1
Title	Login as admin
Requirement	The user shall be able to login
Source	Admin, Hospital, Vaccine Center
Rationale	To login into the system
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Table 2: Description of FR-2

Identifier	FR-2
Title	Input information
Requirement	The user shall be able to enter email, password in the required fields to login
Source	Admin, Hospital, Vaccine Center
Rationale	User will enter his login information to login into the system
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Table 3: Description of FR-3

Identifier	FR-3
Title	Check Remember me check box
Requirement	The user shall be able to check remember me check box.
Source	Hospital, Admin, Vaccine Center
Rationale	To check remember me check box so that user will be remembered when he visit the website.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Table 4: Description of FR-4

Identifier	FR-4
Title	Click on Login Button
Requirement	The user shall be able to click on login button to login to the web application
Source	Hospital, Vaccine center, admin
Rationale	To login to the system
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Table 5: Description of FR-5

Identifier	FR-5
Title	Prediction
Requirement	The user shall be able to click on prediction tab from nav bar.
Source	Admin
Rationale	User will click on prediction to predict future cases and stocks.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Medium

Table 6: Description of FR-6

Identifier	FR-6
Title	Predict Vaccine Stock
Requirement	The user shall be able to click on predict stock from the prediction screen.
Source	Admin
Rationale	To obtain vaccine stock prediction for future needs.
Business Rule (if required)	N/A
Dependencies	FR-5
Priority	Medium

Table 7: Description of FR-7

Identifier	FR-7
Title	Predict future cases
Requirement	The user shall be able to click on predict future cases from the prediction screen.
Source	Admin
Rationale	To obtain future cases prediction.
Business Rule (if required)	N/A
Dependencies	FR-5
Priority	Medium

Table 8: Description of FR-8

Identifier	FR-8
Title	Predict future cases by city, area
Requirement	The user shall be able to predict cases by city or area from the prediction screen.
Source	Admin
Rationale	To obtain future cases prediction by city/area.
Business Rule (if required)	N/A
Dependencies	FR-5
Priority	Medium

Table 9: Description of FR-9

Identifier	FR-9
Title	Predict future stock needs by city, area
Requirement	The user shall be able to predict future vaccine stock needs by city or area from the stock prediction screen.
Source	Admin
Rationale	To obtain future stock needs by city/area.
Business Rule (if required)	N/A
Dependencies	FR-5
Priority	Medium

Table 10: Description of FR-10

Identifier	FR-10
Title	View Stats
Requirement	The user shall be able to view stats of entire country
Source	Admin
Rationale	To view stats of entire country.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	medium

Table 11: Description of FR-11

Identifier	FR-11
Title	View Stats by city/area
Requirement	The user shall be able to view stats of specific city or area.
Source	Admin
Rationale	To view stats of specific city or area.
Business Rule (if required)	N/A
Dependencies	FR-10
Priority	medium

Table 12: Description of FR-12

Identifier	FR-12
Title	Search Stats
Requirement	The user will click on search stats to search.
Source	Admin
Rationale	To search stats.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Table 13: Description of FR-13

Identifier	FR-13
Title	Search Stock by city/area
Requirement	The user will click on search stock stats from the search screen
Source	Admin
Rationale	To search stock stats by city/area.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Table 14: Description of FR-14

Identifier	FR-14
Title	Search Cases by city/area
Requirement	The user will click on search cases stats from the search screen
Source	Admin
Rationale	To search cases stats by city/area.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Table 15: Description of FR-15

Identifier	FR-15
Title	Search child info
Requirement	The user will click on search child info from the search screen
Source	Admin
Rationale	To search child vaccination info by entering his ID to the search field.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Table 16: Description of FR-16

Identifier	FR-16
Title	Manage sub admins
Requirement	The user will click on manage sub admins.
Source	Admin
Rationale	To manage sub admins.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Table 17: Description of FR-17

Identifier	FR-17
Title	Add sub admin
Requirement	The user will add new sub admin from manage admin screen.
Source	Admin
Rationale	To add new sub admins from the system.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Table 18: Description of FR-18

Identifier	FR-18
Title	Remove sub admin
Requirement	The user will remove sub admin from manage admin screen.
Source	Admin
Rationale	To remove sub admins from the system.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Table 19: Description of FR-19

Identifier	FR-19
Title	View sub admin progress
Requirement	The user will view sub admin progress.
Source	Admin
Rationale	To view sub admin progress by click on sub admin name from manage sub admins screen.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Functional Requirements of Parent:

Table 20: Description of FR-20

Identifier	FR-20
Title	Sign up
Requirement	The user will click on sign up to register to the application.
Source	Hospital, Polio worker
Rationale	To Register account.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Table 21: Description of FR-21

Identifier	FR-21
Title	Fill information
Requirement	The user shall be able to fill information in the input fields
Source	Hospital, Polio worker
Rationale	To input information of user i.e name, email, password etc.
Business Rule (if	N/A
required)	
Dependencies	N/A
Priority	High

Table 22: Description of FR-22

Identifier	FR-22
Title	Sign up Button
Requirement	The user shall be able to click on sign up button to register.
Source	Hospital, Polio worker
Rationale	To Register account by clicking on sign up
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Table 23: Description of FR-23

Identifier	FR-23
Title	Login button
Requirement	The user shall be able to click on login button if he already have an account.
Source	Hospital, Polio worker
Rationale	To Login into the system if user already have an account
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Table 24: Description of FR-24

Identifier	FR-24
Title	Login
Requirement	The user shall be able to login from mobile app
Source	Parent, Polio worker
Rationale	To login into the system from mobile application
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Table 25: Description of FR-25

Identifier	FR-25
Title	Input information
Requirement	The user shall be able to enter email, password in the required fields to login from mobile app
Source	Parent, Polio worker
Rationale	User will enter his login information to login into the system from mobile app.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Table 26: Description of FR-26

Identifier	FR-26
Title	Check Remember me check box
Requirement	The user shall be able to check remember me check box.
Source	Parent, Polio worker
Rationale	To check remember me check box so that user will be remembered when he open the mobile app.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Table 27: Description of FR-27

Identifier	FR-27
Title	Click on Login Button
Requirement	The user shall be able to click on login button to login to the mobile application
Source	Parent, Polio worker
Rationale	To login to the system from mobile app
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Table 28: Description of FR-28

Identifier	FR-28
Title	Click on View child details
Requirement	The user shall be able to click on view child details to view his child information
Source	Parent
Rationale	To view the child vaccination and other details
Business Rule (if required)	N/A
Dependencies	N/A
Priority	medium

Table 29: Description of FR-29

Identifier	FR-29
Title	Enter child ID
Requirement	The user shall be able to enter his child ID to view his details
Source	Parent
Rationale	To enter child ID to view his details.
Business Rule (if	N/A
required)	
Dependencies	N/A
Priority	medium

Table 30: Description of FR-30

Identifier	FR-30
Title	Receive notifications
Requirement	The user shall be able to receive notifications when vaccine center will update his child info.
Source	Parent
Rationale	To receive notifications.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	medium

Identifier	FR-31
Title	Confirm vaccinations
Requirement	The user shall be able to confirm vaccination of his child.
Source	Parent
Rationale	To confirm vaccination.
Business Rule (if	N/A
required)	
Dependencies	N/A
Priority	medium

Identifier	FR-32
Title	Check child growth
Requirement	The user shall be able to click on check child growth.
Source	Parent
Rationale	To check growth of child.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Identifier	FR-33
Title	Fill information
Requirement	The user shall be able to fill his child information to check his child growth
Source	Parent
Rationale	To fill child info to see child growth
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Identifier	FR-34
Title	Click submit
Requirement	The user shall be able to click on submit to see his child growth.
Source	Parent
Rationale	To click on submit to check growth of child.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Identifier	FR-35
Title	View suggested diet
Requirement	The user shall be able to click on view suggested diet from child growth screen
Source	Parent
Rationale	To click on view suggested diets to view diet
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Identifier	FR-36
Title	Update settings
Requirement	The user shall be able to click on settings to update his user settings
Source	Parent, Polio worker
Rationale	To click on settings to update his settings
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Identifier	FR-37
Title	Update password
Requirement	The user shall be able to click on update password from settings
Source	Parent, Polio worker
Rationale	To click on update password from settings to update password.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Identifier	FR-38
Title	Add new password
Requirement	The user shall be able to add new password from the update password screen.
Source	Parent, Polio worker
Rationale	To fill update password fields to update password.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Functional Requirements of Polio Worker:

ancolonal require	
Identifier	FR-39
Title	Update child record
Requirement	The user shall be able to update child vaccination record.
Source	Polio worker
Rationale	To update child vaccination record.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Identifier	FR-40
Title	Send notifications
Requirement	The user shall be able to send notifications when he updates child vaccination record.
Source	Polio worker
Rationale	To send notification to parent.
Business Rule (if required)	N/A
Dependencies	FR-39
Priority	low

Identifier	FR-41
Title	Receive confirmation
Requirement	The user shall be able to receive confirmation of vaccination from parent when he updates the child vaccination info.
Source	Polio worker
Rationale	To receive confirmation of vaccination from parent.
Business Rule (if required)	N/A
Dependencies	FR-39
Priority	low

Identifier	FR-42
Title	Update status
Requirement	The user shall be able to update child vaccination status when the parents confirm vaccination.
Source	Polio worker
Rationale	To update child vaccination status when parent confirms vaccination.
Business Rule (if required)	N/A
Dependencies	FR-39
Priority	low

Identifier	FR-43
Title	Report cases
Requirement	The user shall be able to report authorities about polio cases.
Source	Polio worker
Rationale	To report authorities about polio cases.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Identifier	FR-44
Title	Get Symptoms Data
Requirement	The user shall be able to add symptoms data in system
Source	Polio worker
Rationale	To check polio symptoms
Business Rule (if required)	N/A
Dependencies	N/A
Priority	low

Identifier	FR-45
Title	Check Symptoms
Requirement	The user shall be able to check symptoms through system
Source	Polio worker
Rationale	To check polio symptoms
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Functional Requirements of sub-admin (Hospital):

Identifier	FR-46
Title	Sign up from web app.
Requirement	The user shall be able to click on sign up from web application
Source	Hospital, Vaccination center
Rationale	To Register account as hospital, vaccination center
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Identifier	FR-47
Title	Fill information
Requirement	The user shall be able to fill information for sign up
Source	Hospital, Vaccination center
Rationale	To fill information about sign up like name, email, password etc
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Identifier	FR-48
Title	Sign up Button
Requirement	The user shall be able to click on sign up button to register.
Source	Hospital, Vaccination center
Rationale	To Register account.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Identifier	FR-49
Title	Login button
Requirement	The user shall be able to click on login button if he already have an account.
Source	Hospital, Vaccination center
Rationale	To Login account if user already have an account.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Identifier	FR-50
Title	Click on add child record Button
Requirement	The user shall be able to click on add child record to add record of newly born child
Source	Hospital
Rationale	To enter record of newly born child into the system.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Identifier	FR-51
Title	Enter child details
Requirement	The user shall be able to enter details of newly born child
Source	Hospital
Rationale	To enter record of newly born child like date of birth, time, father CNIC etc.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	High

Identifier	FR-52
Title	Submit child record
Requirement	The user shall be able to click on submit button to add record of newly born child
Source	Hospital
Rationale	To submit record into the database.
Business Rule (if required)	N/A
Dependencies	FR-49
Priority	High

Identifier	FR-53
Title	Click on update child record Button
Requirement	The user shall be able to click on update child record to update record of newly born child
Source	Hospital
Rationale	To update record of newly born child i.e name.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	Low

Identifier	FR-54
Title	Enter id of child
Requirement	The user shall be able to enter ID of child to update child record.
Source	Hospital
Rationale	To update record of newly born child.
Business Rule (if	N/A
required) Dependencies	FR-50
Dependencies	TK-JU
Priority	Low

Identifier	FR-55
Title	Enter updated child details
Requirement	The user shall be able to enter updated details of a child
Source	Hospital
Rationale	To update record of newly born child.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	medium

Identifier	FR-56
Title	Submit updated child record
Requirement	The user shall be able to click on update record button to update record of newly born child
Source	Hospital
Rationale	To update record of newly born child.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	Low

Identifier	FR-57
Title	Click on print birth certificate button
Requirement	The user shall be able to click on print birth certificate button to print birth certificate of newly born child
Source	Hospital
Rationale	To print birth certificate of newly born child.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	High

Identifier	FR-58
Title	Adjust print options
Requirement	The user shall be able to adjust print options
Source	Hospital
Rationale	To print birth certificate of newly born child.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	Low

Identifier	FR-59
Title	Click on print
Requirement	The user shall be able to click on print button to print birth certificate.
Source	Hospital
Rationale	To print birth certificate of newly born child.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	High

Identifier	FR-60
Title	Click on print vaccination dates button
Requirement	The user shall be able to click on print vaccination dates button to print auto generated vaccination dates of newly born child
Source	Hospital
Rationale	To print vaccination dates of newly born child.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	high

Identifier	FR-61
Title	Search child information
Requirement	The user shall be able to click on search child information to search child information by ID.
Source	Hospital
Rationale	To search specific child info by their ID.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Identifier	FR-62
Title	Check vaccine requirements
Requirement	The user shall be able to click on vaccine requirements to check future requirements of vaccine.
Source	Hospital, Vaccine center
Rationale	To check future vaccine requirements.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Identifier	FR-63
Title	Update child vaccination record
Requirement	The user shall be able to update child vaccination record from web application.
Source	Hospital, Vaccine center
Rationale	To update child vaccination record.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	High

Identifier	FR-64
Title	Send notifications
Requirement	The user shall be able to send notifications when he updates child vaccination record.
Source	Hospital, Vaccine center
Rationale	To send notification to parent.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	Low

Identifier	FR-65
Title	Receive confirmation
Requirement	The user shall be able to receive confirmation of vaccination from parent when he updates the child vaccination info.
Source	Hospital, Vaccine center
Rationale	To receive confirmation of vaccination from parent.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	Low

Identifier	FR-66
Title	Update status
Requirement	The user shall be able to update child vaccination status when the parents confirm vaccination.
Source	Hospital, Vaccine center
Rationale	To update child vaccination status when parent confirms vaccination.
Business Rule (if required)	N/A
Dependencies	FR-50
Priority	Low

Identifier	FR-67
Title	Report authorities
Requirement	The user shall be able to report authorities about polio cases.
Source	Hospital, Vaccine center
Rationale	To report authorities about polio cases.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Identifier	FR-68
Title	Manage vaccine stock
Requirement	The user shall be able to click on manage vaccine stock.
Source	Hospital, Vaccine center
Rationale	To manage vaccine stock.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Identifier	FR-69
Title	Add stock
Requirement	The user shall be able to click on Add vaccine stock
Source	Hospital, Vaccine center
Rationale	To add new vaccine stock
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Identifier	FR-70
Title	update stock
Requirement	The user shall be able to click on update vaccine stock
Source	Hospital, Vaccine center
Rationale	To update vaccine stock
Business Rule (if	N/A
required)	
Dependencies	N/A
Priority	Low

Identifier	FR-71
Title	View stock
Requirement	The user shall be able to click on view vaccine stock
Source	Hospital, Vaccine center
Rationale	To view vaccine stock
Business Rule (if	N/A
required)	
Dependencies	N/A
Priority	Low

Identifier	FR-72
Title	Request for stock
Requirement	The user shall be able to click on request more stock from the higher authorities
Source	Hospital
Rationale	To request for more vaccine stock
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Functional Requirements for Vaccination Center:

Identifier	FR-73
Title	Manage campaigns
Requirement	The user shall be able to click on manage vaccine campaigns to manage new campaigns
Source	Vaccine center
Rationale	To manage campaigns
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Identifier	FR-74
Title	Make new campaigns
Requirement	The user shall be able to click on make new campaign to initiate new campaign
Source	Vaccine center
Rationale	To make new campaigns
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Identifier	FR-75
Title	View campaign status
Requirement	The user shall be able to click on any campaign to view their status
Source	Vaccine center
Rationale	To view existing campaign status
Business Rule (if	N/A
required)	
Dependencies	N/A
Priority	Low

Identifier	FR-76
Title	Allot workers for campaign
Requirement	The user shall be able allot worker for campaigns
Source	Vaccine center
Rationale	To allot worker for new campaigns
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

Identifier	FR-77
Title	Allot vaccine for campaign
Requirement	The user shall be able allot vaccine for campaigns
Source	Vaccine center
Rationale	To allot vaccine for new campaigns
Business Rule (if	N/A
required)	
Dependencies	N/A
Priority	Low

Identifier	FR-78
Title	Notify public
Requirement	The user shall be able to notify public by sending them text messages
Source	Vaccine center
Rationale	To notify public by sending text messages to already registered users.
Business Rule (if required)	N/A
Dependencies	N/A
Priority	Low

5. Non-Functional Requirements

5.1 Reliability

REA-1: Parent and child data should be added accurately as whole system is build on this single thing

REA-2: Admin approval is important for all the work done

5.2 Usability

USE-1: The system must allow user to see his child vaccine data with only one click

USE-2: The system shall provide information for comforming notification

USE-3: The system shall work in those areas too where internet facility is not good

5.3 Accessibility

ACC-1- It must be accessible from remote areas. It must be accessible through mobile and web efficiently

5.4 Compatible

COM-1- The system shall be compatible with both Android and iOS. Web should be easily compatible on all major browsers

5.5 Security

SEC-1: Security in this system should be very high as it contains sensitive information.

6. External Interface Requirements

6.1 User Interfaces

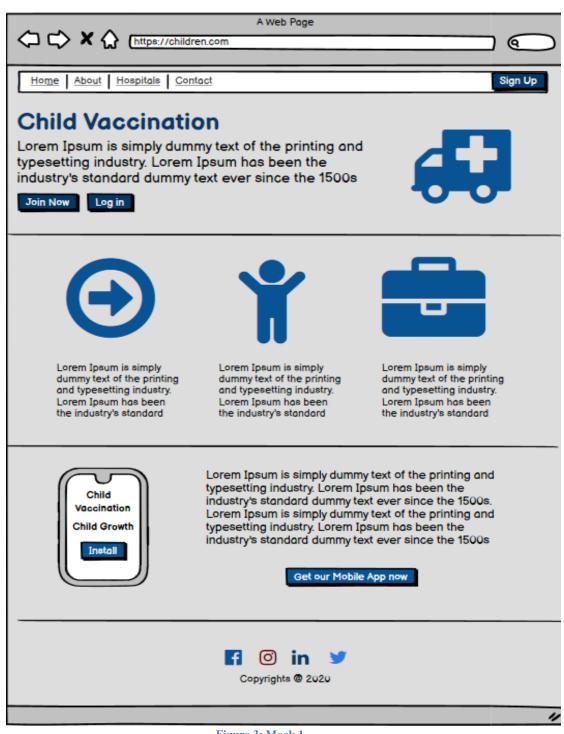


Figure 3: Mock 1

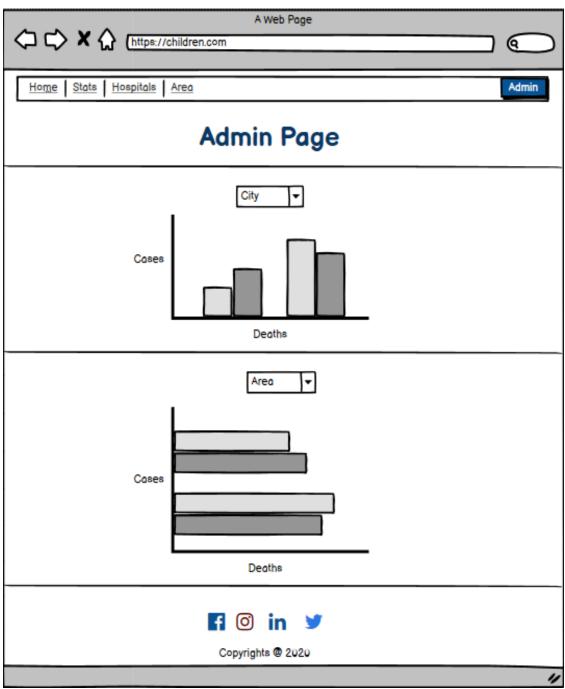


Figure 4: Mock 2

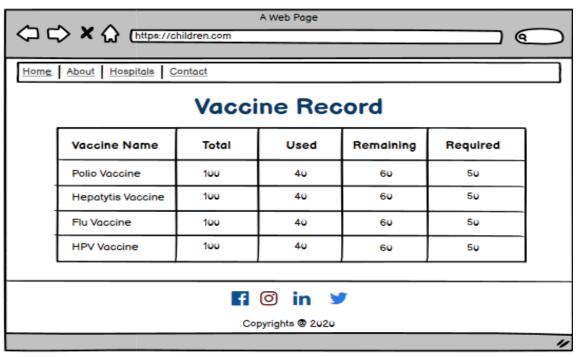


Figure 5: Mock 3

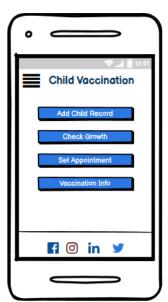


Figure 6: Mock 4

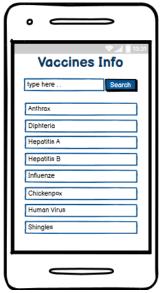


Figure 7: Mock 5

6.2 Software Interfaces

SI-I: The developers shall use Visual Studio Code as the code editor for application development.

SI-II: The system shall use a NoSQL Database i.e. Mongo DB for storing, maintaining and retrieving user records.

SI-III: The system shall support Android OS and iOS for this mobile application.

6.3 Hardware Interfaces

This system is not using any hardware interface right now

6.4 Communication Interfaces

There is no communication interface in our project

7. Project Gantt Chart

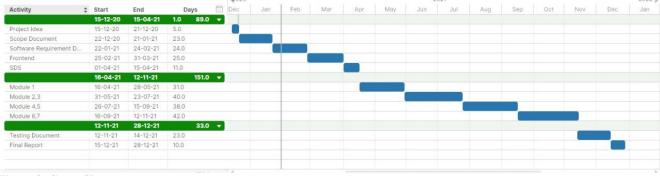


Figure 8: Gantt Chart

8. Conclusion

As name of our project is explaining that this system is related to child vaccination and growth tracking so in this document we have mentioned all the specific requirements of our project with actor wise diagrams. We have mentioned all the features which this system will provide. Mocks are also present to give an idea about interfaces.

9. References

10. Plagiarism Report

