Software Requirments Specifications For Vaccination Scheduling And Alarming Version 1.0 Prepared by Team Faculty of Computers and Information Helwan University

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1 Introduction

1.1 Purpose

Service aims to enable citizens to get the dates of vaccinations alerts either through Short messages up to their mobile or via e-mail.

1.2 Scope

Our project is a website that enables its user to get the dates of Vaccines to ease the queues of vaccinations and aim the parents to Maintain the health of thier childrens. Our system provides user with information about diffrent types of vaccinations depending on his child's age To limit the mistake of taking the inappropriate vaccines, End user can use our system eaisly.

2 Functional Requirments

This section includes the requirments that specify all fundamental actions of the software system.

2.1 Parent

Function Requirement 1 ID: FR1 Title: Register. **DESC**: Given that the parent will be registered for the first time.then Parent will Fill form with children's information(ID,AGE,SSN,).

RAT: In order for the parent to register in the system.

DEB: None.

Function Requirement 2

ID: FR2
Title: LogIn

DESC: Given that parent should be registered ,then parent should be able to

login.

RAT: In order for the Parent to log in the system.

DEB: FR1.

Function Requirement 3

ID: FR3

Title: Reseve Appointment

DESC: Given that the parent should be loged in the system.then the parent

should be able to make an appointment.

RAT: In order for the parent to Rserve appointment.

DEB: FR2.

Function Requirement 4

ID: FR4

Title: Reschudle Appointement

DESC: Given that parent should be reserved an appointment and time is not

suitable for him, then parent should be reschudle his appointment. **RAT:** In order for the parent to Reschudle his appointment.

DEB: FR3.

Function Requirement 5

ID: FR5

Title: Show Child Report

DESC: Given that parent should be loged in the system .then the parent should

be able to show his report with the child's last state.

RAT: In order for the parent to see his child report.

DEB: FR11.

Function Requirement 6

ID: FR6

Title: Edit Profile

DESC: Given that parent should be loged in the system .then the parent should

be able to update his profile informations.

RAT: In order for the parent to edit his profile.

DEB: FR2.

Function Requirement 7

ID: FR7

Title: Send Feedback

DESC: Given that parent should be loged in the system .then the parent should

be able send his feedback to system.

RAT: In order for the parent to send feedback to system.

DEB: FR2.

Function Requirement 8

ID: FR8

Title: Show Notification

DESC: Given that parent should be loged in the system .then the parent should

be able show system notification.

RAT: In order for the parent to show system notification.

DEB: FR2,FR10.

Function Requirement 9

ID: FR9
Title: logout

DESC: Given that parent should be loged in the system .then the parent should

be able to logout from system.

RAT: In order for the parent to sign out form system.

DEB: FR2.

2.2 System

Function Requirement 10

ID: FR10

Title: Send Notification.

DESC: Given that the parent will be registered in the system and if some thing

is new then the System will send notifications to parent.

RAT: In order for System to send notifications to parent.

DEB: None.

Function Requirement 11

ID: FR11

Title: Generate Child Report.

DESC: Given that the parent will be registered in the system.then the System will be able to generate a report with the child's last state.

RAT: In order for System to send notifications to parent.

DEB: None

Function Requirement 12

ID: FR12

Title: Generate Finished Cases.

DESC: Given that the Nurse cheched attendance of childs.then the System will

be able to generate a report with Finished cases.

RAT: In order for System to Generate Finished cases.

DEB: None

Function Requirement 13

ID: FR13

Title: Generate Finicial Report.

DESC: Given that the Employee add invoices and some finicial information.then

the System will be able to generate a report with Finicial inspects.

RAT: In order for System to Generate Finicial Report.

DEB: None

2.3 Employee

Function Requirement 14

ID: FR14 Title: login.

DESC: Given that the employee should be Has username and password in the

system .then employee will be able to login the system.

RAT: In order for Employee to log in system.

DEB: None.

Function Requirement 15

ID: FR15

Title: Show Finicial Report.

DESC: Given that the employee should be logged in the system .then employee will be able to generate a report with any finicial issue (equipments damage,payments,salaries,number of vaccines, invoices .etc)in the system.

RAT: In order for Employee to generate finicial report.

DEB: FR13,FR14.

Function Requirement 16

ID: FR16

Title: Add Invoices.

DESC: Given that the employee should be logged in the system .then employee

will be able to generate invoices with whole payments in the system.

RAT: In order for Employee to Add invoices to system.

DEB: FR14.

2.4 Nurse

Function Requirement 18

ID: FR18 Title: login.

DESC:Given that the Nurse should Has username and password.then employee

will be able to login the system.

RAT: In order for Nurse to log in system.

DEB: None.

Function Requirement 19

ID: FR19

Title: Reschudle Appointment.

DESC: Given that parent should be reserved an appointment and time is not suitable for him and nurse should be logged in the system ,then Nurse should be able to reschude his appointment.

be able to reschudle his appointment.

RAT: In order for Nurse to Rescudle Parent appointment.

DEB: FR3,FR18.

Function Requirement 20

ID: FR20

Title: Check Attendence.

DESC: Given that parent come to appointment or not, then Nurse should be

able to check if the parent come to appointment or not. **RAT:** In order for Nurse to Check Attendence of childs.

DEB: FR18.

Function Requirement 21

ID: FR21

Title: Show Finsihed Cases.

DESC: Given that the System should generated a report with Finished cases, then

Nurse should be able to show the report.

RAT: In order for Nurse to show finished cases.

DEB: FR12.

Function Requirement 22

ID: FR22 Title: logout.

DESC: Given that Nurse should be logged in the system ,then Nurse should

be able to log out from the system.

RAT: In order for Nurse to log out from system.

DEB: FR18

2.5 Admin

Function Requirement 24

ID: FR24 Title: login.

DESC: Given that the Admin Has a username and password.then Admin will

be able to login the system.

RAT: In order for Admin to log in system.

DEB: FR23.

Function Requirement 25

ID: FR25

Title: Show Child report.

 $\mathbf{DESC} :$ Given that the System should generated a report with last state for

child, then Admin should be able to show the report.

RAT: In order for Admin to see child's report .

DEB: FR11,FR24.

Function Requirement 26

ID: FR26

Title: Show Finsihed Cases.

DESC: Given that the System should generated a report with Finished cases, then

Admin should be able to show the report with finished cases. **RAT:** In order for Admin to see the Finished cases report .

DEB: FR12,FR24.

Function Requirement 27

ID: FR27

Title: Add User

DESC: Given that Admin should be logged in the system ,then Admin should

be able to add (Nurse, employee, parent, child).

RAT: In order for Admin to add user to system .

DEB: FR24 .

Function Requirement 28

ID: FR28

Title: Delete User

DESC: Given that Admin should be logged in the system ,then Admin should

be able to Delete (Nurse, employee, parent, child).

 ${\bf RAT:}$ In order for Admin to Delete user from system .

DEB: FR24 .

Function Requirement 29

ID: FR29

Title: Update User.

DESC: Given that Admin should be logged in the system ,then Admin should

be able to Update (Nurse, employee,parent,child).

RAT: In order for Admin to Update user information.

DEB: FR24.

Function Requirement 30

ID: FR30

Title: Search User.

DESC: Given that Admin should be logged in the system ,then Admin should

be able to Search for (Nurse,employee,parent,child) with ID. RAT: In order for Admin to Search about user in system . RAT: In order for Admin to Update user information.

DEB: FR24.

Function Requirement 31

ID: FR31

Title: Show financial report

DESC: Given that Employee should be generated a financial report, then Ad-

min should be able to show the financial report.

Deb: FR24,FR13.

Function Requirement 32

ID: FR32 Title: logout

DESC: Given that Admin should be logged in the system, then Admin should

be able to log out from the system.

Deb: FR24

3 Non Functional Requirments

3.1 Privileges Management

Sa1: System shall provide each system user with a limitation privileges regarding to the login session. Admin is only user that can Register new user and can delete user form Database.

Sa2: System should stop if any external hachers attack.

3.2 Security

T1: The access permission date only be changed by Admin.

T2: All software data must be bacup every 24 hours in safe location.

3.3 Performance

Pe1: The system should have a quick response.

3.4 Reliability

R1: The software should be available to te end user.

R2: The software should be not failure.

3.5 Usability

U1: The software should have user manuals.

U2: The software should have informative error message.

4 Use Case Specification

4.1 Register UseCase

UseCase Name: Register

Actors: Parent

Pre-Condition: User enter his information (Username, Password, ... etc)

Basic Flow:

1-Open Home Page

2-Open Registration page

3-Complete Fields

4-Click on submit Button

Alternative Flow: If Entered data is incorrect then The User is prompted to

complete Information again.

Post Condition: If The case completed Successfully, User can Login

4.2 Login UseCase

UseCase Name: Login

Actors: Admin, Nurse, Employee, Parent

Pre-Condition: User enter Username, Password

Basic Flow: 1-Open Home Page

2-Enter Username and Password

3-Click on Login Button

Alternative Flow: If The Username or Password is incorrect then The User

is prompted to re-enter Information again.

Post Condition: If The case completed Successfully, User can access

4.3 Reserve Appointment UseCase

UseCase Name: Reserve Appointment

Actors: Parent

Pre-Condition: There are some appointments that chooses what suits him

through it. **Basic Flow:**

1-Open Home Page

2-Open Reservation Page.

3-choose time.

4-Click on Submit Button

Alternative Flow: in case of a problem the parent can Leave complaint. Post Condition: If The case completed Successfully, System send him email.

4.4 Reschudle Appointment UseCase

UseCase Name: Reschudle Appointment

Actors: Parent, Nurse

Pre-Condition: There is something that prevented him from attending the

previous schedule.

Basic Flow:

1-Open Home Page

2-Open Reservation Page.

3-Choose a suitable time.

4-Click on Submit Button

Alternative Flow: in case of a problem the parent can Leave complaint.

Post Condition: If The case completed Successfully, System send him email.

4.5 Generate Child Report UseCase

UseCase Name: Generate Child Report

Actors: System

Pre-Condition: System Query Data from Database.

Basic Flow:

System generate a report with lastest child's case and both Admin, Parent can

show the Report.

Alternative Flow: None.

Post Condition: If The case completed Successfully, Parent can see report.

4.6 Show Child Report UseCase

UseCase Name: Show Child Report

Actors: Admin, Parent

Pre-Condition: Users Logged in successfully.

Basic Flow: 1-Open Home Page 3-Choose a Report Link.

Alternative Flow: in case of a problem the parent can Leave complaint. Post Condition: If The case completed Successfully, Users can see report.

4.7 Edit Profile UseCase

UseCase Name: Edit Profile

Actors: Parent

Pre-Condition: Parent is logged successfully and has a profile.

Basic Flow:

1-Click on Edit Profile link

2-Edit Information

3-Click on Update Information Button.

Alternative Flow: in case of a problem the parent can Leave complaint.

Post Condition: Profile is updated.

4.8 Send Feedback UseCase

UseCase Name: Send Feedback

Actors: Parent

Pre-Condition: Parent has a feedback

Basic Flow:

1-Click on Send Feedback link

 $\hbox{2-Writer your feedback}.$

3-Click on Send Buttond.

Alternative Flow: in case of a problem the parent can Leave complaint.

Post Condition: Feedback is sent.

4.9 Send Notification UseCase

UseCase Name: Send Notification

Actors: System

Pre-Condition: There is a new Notification to parent.

Basic Flow:

System send Parent Notifications to alarm him with time of vaccines.

Alternative Flow: None.

Post Condition: System left a message to parent .

4.10 Show Notification UseCase

UseCase Name: Show Notification

Actors: Parent

Pre-Condition: System send Parent Notifications

Basic Flow: 1-Open home page.

2-Clik on Notification link.

Alternative Flow: in case of a problem the parent can Leave complaint.

Post Condition: Parent has seen Notification.

4.11 Logout UseCase

UseCase Name: Logout

Actors: Employee, Nurse, Admin, Parent. **Pre-Condition:** User is logged successfully.

Basic Flow: 1-Open home page. 2-Clik on Logout link.

Alternative Flow: in case of a problem the User can Leave complaint.

Post Condition User Signed out from system.

4.12 Generate Finished Cases UseCase

UseCase Name: Generate Finished Cases

Actors: System.

Pre-Condition: Nurse check attendance of cases then System Generate a re-

port with Finished Cases.

Basic Flow: System Generate a report whih finished cases.

Alternative Flow: None.

Post Condition System Generated the Finished Cases, Nurse and Admin show

the Report.

4.13 Show Finished Cases UseCase

UseCase Name: Show Finished Cases

Actors: Nurse, Admin.

Pre-Condition: Nurse check attendance of cases then System Generate a re-

port with Finished Cases then Users can see The report.

Basic Flow:

1-Open home page.

2-Clik on Finished Cases link.

Alternative Flow: in case of a problem the Nurse can Leave complaint.

Post Condition System Generated the Finished Cases, Nurse and Admin show

the Report.

4.14 Add Invoices UseCase

UseCase Name: Add Invoices

Actors: Employee.

Pre-Condition: Employee is logged succesfully.

Basic Flow:

1-Open home page.

2-Clik on Add invoices link.

Alternative Flow: in case of a problem the Employee can Leave complaint.

Post Condition: invoices hae been Added to System.

4.15 Generate Finincial Report UseCase

UseCase Name: Generate Finincial Report

Actors: System.

- m

Pre-Condition: System will query a Finincial Informations.

Basic Flow:

System will Generate a Finincial Report with all Financial aspects.

Alternative Flow: None

Post Condition System Generated the Finicial Report and Employee, Admin

can see the finincial report.

4.16 Show Finincial Report UseCase

UseCase Name: Show Finincial Report

Actors: Admin, Employee.

Pre-Condition: System Generate Finincial Report with all Financial aspects.

Basic Flow: 1-Open home page.

2-Clik on Finicial Report link.

Alternative Flow: in case of a problem the Employee can Leave complaint.

Post Condition Users can see the finincial report.

4.17 Check Attendanse UseCase

UseCase Name: Check Attendanse

Actors: Nurse.

Pre-Condition: Nurse is logged succesfully.

Basic Flow:

1-Open home page.

2-Clik on Attendance link.

Alternative Flow: in case of a problem the Nurse can Leave complaint.

Post Condition: Attendance has been checked then system can generate fin-

ished cases report.

4.18 Add User UseCase

UseCase Name: Add Actors: Admin.

Pre-Condition: Admin is logged succesfully..

Basic Flow:

1-Click on Add User Link

2-Enter Email of new User as Username and password.

3-Click on Add User Button

Alternative Flow: If email exists in database ,prompt Admin to enter new

 Email

Post Condition: Message is sent to his email.

4.19 Delete User UseCase

UseCase Name: Delete User

Actors: Admin.

Pre-Condition: Admin is logged succesfully.

Basic Flow:

1-click on Delete User Link

2-select search type

3-enter search term

4-Select User or Users from search result to delete

5-click on Delete Button

Alternative Flow: Prompt Admin if no search result returned. Post Condition: The Selected User or Users is/are deleted.

4.20 Update User UseCase

UseCase Name: Update User

Actors: Admin.

Pre-Condition: Admin is logged succesfully.

Basic Flow:

1-click on Update User Link

2-select search type 3-enter search term

4-Select User or Users from search result to Update

5-click on Edit Button 6-Click on submit Button.

Alternative Flow: Prompt Admin if no search result returned.

Post Condition: Message is sent to his email.

4.21 Search User UseCase

UseCase Name: Search User

Actors: Admin.

Pre-Condition: Admin is logged successfully.

Basic Flow:

1-click on Search User Link

2-select search type 3-enter search term

Alternative Flow: Prompt Admin if no search result returned.

Post Condition: User Found or Not Found

5 Diagrams

This section will help you to understand system flow.

5.1 Block Diagram

This diagram will show us Block diagram .

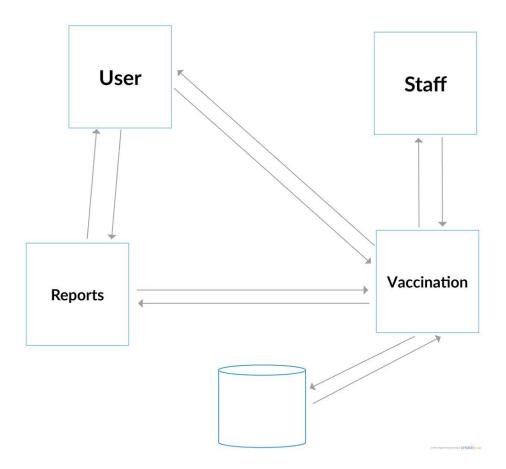


Figure 1: this figure explain block diagram flow

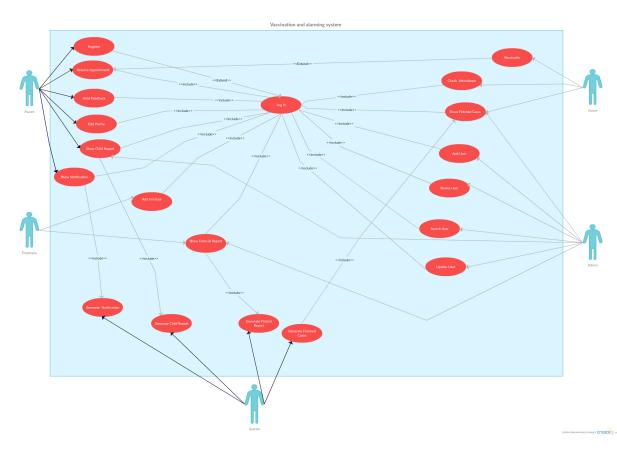


Figure 2: this figure explain USecase diagram flow

5.2 Usecase Diagram

This diagram will show us Usecase diagram.

5.3 Class Diagram

This diagram will show us Class diagram.

5.4 Activity Diagram

This diagram will show us Activity diagram.

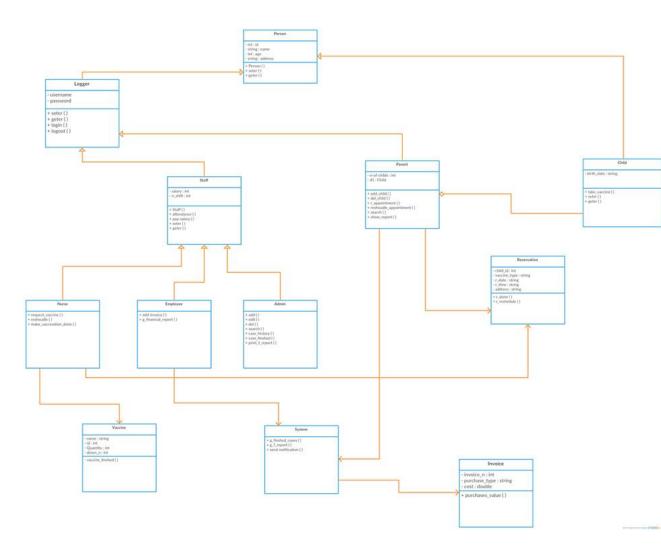


Figure 3: this figure explain Class diagram flow

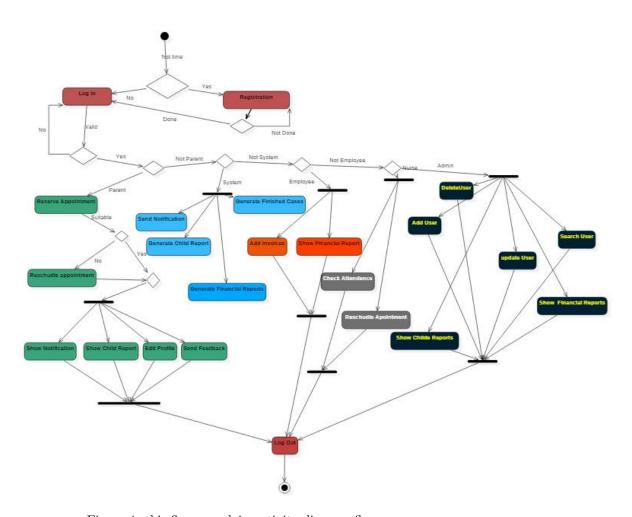


Figure 4: this figure explain avtivity diagram flow