Use Cases

for

Save Me

Version 1.2

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From SS3 CodeMonkeys

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Revision History

Name	Date	Reason For Changes	Version
Lee Zong Yu	7-Feb	Add the initial Use case Descriptions 1-3	1.0
Ryan	8-Feb	Add the initial use Case Descriptions 7	1.1
Shi Zheng Yu	9-Feb	Add the initial use case descriptions 4-6	1.2

Use Case ID:	1		
Use Case Name:	Enter the system permanently either by register or log in		
Created By:	Lee Zong Yu	Last Updated By:	Lee Zong Yu
Date Created:	6-Feb-2022	Date Last Updated:	6-Feb-2022

Actor:	Normal User
Description:	All users are required to register an account under this system. Information collected will be mainly used when an emergency event happens. After registration, the user will be stored and protected by the system.
Preconditions:	• User must download the application • User must have a valid Singapore Number • User must be the first time sign in to the system
Postconditions:	• User data will be stored in the system • The user is sign in permanently in the system.
Priority:	HIGH
Frequency of Use:	one per user
Flow of Events:	When user first enter the application, user choose to register an account User will enter their phone number, password and confirm password After clicking next button, and OTP is send to the phone number and the user is prompted to enter the Code. After validation of phone number is success, user will be asked to upload their photo, Name, NRIC, Home Address, Work Address, Age, Emergency Contact Name and Emergency Contact Number. All of it are required to fill except Age. The user will be asked to enable location services and enable access to contacts and phone After this, the user will be signed in into the system permanently.
Alternative Flows:	1.AC.1 If user have a registered account, user can choose to sign in an account. User will enter their phone number and password. Once the password is validated, the user can enter the system permanently.
Exceptions:	1.EX.1 At step 2, if password and confirm password is wrong, The system will show red error message and the user have to reenter the password. 1.EX.2 When the validation of OTP is failed, the system will return back to the page where user have to enter the phone number. 1.Ex.3

	At step 4, if the user click enter but there is any required information is not filled. The system will show error message and will not let the user pass the system. 1.Ex.4 At step 5, if the user does not allow the access, the user account is still being registered, however cannot enter system until the user allow the access. 1.Ex.5 At 1.AC.1 if the password or phone number is wrong, the user will be asked to fill the phonenumber and password again.
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	This is just an one-time process, the user does not need to do this process at all after first use unless the user uninstall the data.

Use Case ID:	2		
Use Case Name:	Send Save Me request to verified volunteer		
Created By:	Lee Zong Yu	Last Updated By:	Lee Zong Yu
Date Created:	6-Feb-2022	Date Last Updated:	6-Feb-2022

Actor:	Normal User, Admin, Verified Volunteer, A&D Department
Description:	
Preconditions:	The user is sign in permanently in the system through use Case ID 1.
Postconditions:	-
Priority:	HIGH
Frequency of Use:	Zero – Three per user
Flow of Events:	When an emergency event happen, the user can click on the big red Save Me button. A countdown of 10 seconds will be initiated, When the countdown reached 0, the request will be sent to all the verified volunteer within 10 km and also A&D department. The user information such as age, photos , medical conditions will be send to verified volunteers that accept the request A text field is open to allowed the user to enter the additional information
Alternative Flows:	2.AC.1 the user can hold the button to cancel the sending of the request during the countdown of 10 seconds and after the countdown of 10 seconds.
Exceptions:	2.EX.1 The system will reject the request once the user has requested more than 5 times per month
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	3.0		
Use Case Name:	Change Settings		
Created By:	Lee Zong Yu	Last Updated By:	Lee Zong Yu
Date Created:	6-Feb-2022	Date Last Updated:	6-Feb-2022

Actor:	Normal User
Description:	
Preconditions:	• The user is sign in permanently in the system through use Case ID 1.
Postconditions:	-
Priority:	MEDIUM
Frequency of Use:	
Flow of Events:	When the user click menu page on the top. Four button will be shown which is (Change profile, change language, helps and Feedback) If the user click helps and Feedback, It will open a web application that contains helps and can key in feedback for the apps. If the user click change profile, Use Case ID3.1 will happen If the user click change language, Use Case ID 3.2 will happen.
Alternative Flows:	-
Exceptions:	-
Includes:	Use case ID 3.1 Use case ID 3.2
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	3.1		
Use Case Name:	Change Particular		
Created By:	Lee Zong Yu	Last Updated By:	Lee Zong Yu
Date Created:	6-Feb-2022	Date Last Updated:	6-Feb-2022

Actor:	Normal User and DynamoDB
Description:	-
Preconditions:	• The user is sign in permanently in the system through use Case ID 1.
Postconditions:	•
Priority:	MEDIUM
Frequency of Use:	-
Flow of Events:	When user enter the profile page, the profile page will shown with all the user information. The personal data such as NRIC will be censored. Every particulars except NRIC and phone number are editable with the edit button After the edit button is click on a particular, the particular will become editable field. After the confirm button is click, the new edition will be confirmed.
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	3.2		
Use Case Name:	Change language		
Created By:	Lee Zong Yu	Last Updated By:	Lee Zong Yu
Date Created:	6-Feb-2022	Date Last Updated:	6-Feb-2022

Actor:	Normal User
Description:	
Preconditions:	• The user is sign in permanently in the system through use Case ID 1.
Postconditions:	• -
Priority:	LOW
Frequency of Use:	-
Flow of Events:	When the change language button is click, a pop out dropdown will be shown. User choose the language and press ok to confirm
Alternative Flows:	-
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	4		
Use Case Name:	Volunteer Registration		
Created By:	Shi Zhengyu	Last Updated By:	Shi Zhengyu
Date Created:	7-Feb-2022	Date Last Updated:	7-Feb-2022

Actor:	User, Cognito, Server, Admins
Description:	How a regular user signs up as volunteer.
Preconditions:	• The user has already created an account and signed in. • The user is currently not a volunteer. • The user has scanned copy of a valid CPR certificate.
Postconditions:	1. Database entry of the given user is modified, so that the user becomes a volunteer. 2. Under *More* tab, *Achievement* button is unlocked.
Priority:	High
Frequency of Use:	Few
Flow of Events:	User clicks the register as volunteer option on app. App asks user to upload CPR document scanned photo, as well as other relevant information. App lists the legal liabilities as a registered volunteer, and require the user to carefully confirm. User clicks the submission button. The request is sent to review for approval. Human admins review the information, and grant volunteer status to the user.
Alternative Flows:	4.AC.2 If user fail to supply information, or if the picture is obviously invalid (e.g. too large or too small), the app will highlight the incorrect fields and ask user to retry. 4.AC.3 If user refuse to acknowledge the legal agreement, the registration page quits. 4.AC.5 If the certificate does not pass human verification, or the information provided is deemed not accurate, the request will be rejected.
Exceptions:	NA
Includes:	Verify Certificate Validity (Web)
Special Requirements:	1. The certificate should be valid PNG or PDF document, with size no more than 10 MB. 2. Telephone number, if any, must match corresponding country's telephone format.
Assumptions:	NA
Notes and Issues:	NA

Use Case ID:	5		
Use Case Name:	Volunteer Responds to SaveMe! Requests		
Created By:	Shi Zhengyu	Last Updated By:	Shi Zhengyu
Date Created:	7-Feb-2022	Date Last Updated:	7-Feb-2022

Actor:	Volunteers (Candidate Rescuers), Server, Patient
Description:	The process in which volunteer is notified of adjacent emergency, and eventually responds to it.
Preconditions:	- A patient has successfully created a SaveMe! Request. - Server has received the request and has already determined the set of candidate volunteers to transmit requests to. - Volunteers must have their app running in background with permissions correctly set. - Volunteers must have good network signal.
Postconditions:	The statistics of number of assigned rescuers for the incident is updated.
Priority:	High
Frequency of Use:	Roughly same in magnitude as frequency of incidents reported to server
Flow of Events:	Server send SaveMe! requests to candidate rescuers' apps. On receiving the request, a notification pops up from the app, with (if user permits) vibration. Volunteers clicks the notification, which brings them to *Rescue* page of app that shows address, time, possible type of incident and other useful information. Volunteers decide whether to respond to the request or not. If he decides to accept the request, more detailed information, including patient's emergency phone number, name, age will be shown. There will also be a map that navigates from volunteer to the possible location of patient.

Alternative Flows:	5.AC.2 If user opted Do Not Disturb (or if the phone is in silent mode), the app will only push notifications. If user did not respond to the vibration within 1 minutes, the alarm stops itself. 5.AC.4 If volunteer decided to not accept the request for now, the app returns to background, and the notification is dismissed.
Exceptions:	5.EX.1 If for unanticipated reason the server fail to connect to one of the candidate rescuers, the procedure will be retried in a delay for at most 3 times, after which the attempt to contact a given rescuer is aborted. 5.EX.6 If for unanticipated reason app fail to retrieve map data, the rendering for map will be aborted.
Includes:	NA
Special Requirements:	1. App should provide volunteers with tips on performing common first aid actions. 2. App should clearly state that the legal liabilities of volunteers before volunteers were able to confirm rescue.
Assumptions:	NA
Notes and Issues:	NA

Use Case ID:	6.1		
Use Case Name:	Personal Settings Change		
Created By:	Shi Zhengyu	Last Updated By:	Shi Zhengyu
Date Created:	7-Feb-2022	Date Last Updated:	7-Feb-2022

Actor:	User, DynamoDB Cognito
Description:	The user changes profile, language etc.
Preconditions:	• The user is already registered. • The user have good internet connection.
Postconditions:	• The user's profile is changed in server database.
Priority:	Low
Frequency of Use:	Few to Intermediate
Flow of Events:	1. The user opens the app. 2. The user clicks "More" 3. The user clicks "Edit" on the profile page to modify information. 4. The user modify field of interest by editing the respective textbox. 5. The user commit change by press "Save" button. 6. App checks if information satisfies basic requirements (e.g. telephone number matches local format), then upload request to server. App change information cached in local memory. 7. Server change entry accordingly.
Alternative Flows:	6.1.AC.6 If the information does not pass pretest (e.g. telephone does not match local format), corresponding entries will be highlighted, and system will ask user to reenter. User can also click "Remove Account" button. The app asks user to confirm the request by asking user to enter password. App sends the credential to Server, if it matches hashed password entry in Cognito, server performs deletion.
Exceptions:	6.1.EX.6 If app fail to transmit request to server, the local modification is aborted, and notifications about internet issue will be shown.
Includes:	3.0 Change Settings
Special Requirements:	NA
Assumptions:	1. User does not intentionally enter malicious entries.
Notes and Issues:	As written in assumptions, even though we require Mobile OTP to do first time registration, there will still be possible spammers. If time permits, further actions should be taken against them, such as further restrict the registration process, and apply filter on address / telephone entered.

Use Case ID:	6.2		
Use Case Name:	Achievements page		
Created By:	Shi Zhengyu	Last Updated By:	Shi Zhengyu
Date Created:	7-Feb-2022	Date Last Updated:	7-Feb-2022

Actor:	Verified Volunteer, DynameDB
Description:	Volunteer views personal achievements
Preconditions:	User is already a logged-in volunteer. User has good network connection.
Postconditions:	• A (System state will not be changed)
Priority:	Low
Frequency of Use:	Few to Intermediate
Flow of Events:	1. Volunteer clicks "More" Tab of App, then clicks "Achievements" 2. App sends volunteers' credentials to server, server fetches achievement data and send to client; 3. App renders achievements as grid of icons and texts.
Alternative Flows:	NA
Exceptions:	6.2.EX.2 If for any unanticipated reason app fail to send credentials, or if app failed to receive server's request, then notification of "Internet Issue" is shown, and the volunteer page render is aborted. If the local cached credentials is rejected by server, prompt 'login expired' notification, sign user out and abort loading 'Achievements' page.
Includes:	NA
Special Requirements:	NA
Assumptions:	NA
Notes and Issues:	NA

Use Case ID:	7.1		
Use Case Name:	Webapp sign in		
Created By:	Ryan Taw	Last Updated By:	Ryan Taw
Date Created:	7-Feb-2022	Date Last Updated:	7-Feb-2022

Actor:	Admin, Cognito,DynamoDB
Description:	Sign in flow for SAVE ME! webapp
Preconditions:	Admin must be able to access the webapp online Admin must have an webapp account
Postconditions:	-
Priority:	HIGH
Frequency of Use:	Everytime admin uses webapp
Flow of Events:	Admin will enter their email and password Once the email and password is validated, admin will be redirected back to webpage logged in
Alternative Flows:	-
Exceptions:	7.1.EX.1. When signing in, admin enters an email that is not in the required email format (abc@email.com), raise invalid email address format exception 7.1.EX.2. When signing in, admin enters an email that is not in DynamoDB raise invalid email address exception 7.1.EX.3. When signing in, admin enters incorrect password for email address, Cognito raises incorrect password exception
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	7.2		
Use Case Name:	View ongoing rescues		
Created By:	Ryan Taw	Last Updated By:	Ryan Taw
Date Created:	7-Feb-2022	Date Last Updated:	7-Feb-2022

Actor:	Admin, DynamoDB
Description:	View all ongoing rescues
Preconditions:	Admin must be able to access the webapp online Admin must have an webapp account Admin must be signed in
Postconditions:	-
Priority:	MEDIUM
Frequency of Use:	-
Flow of Events:	Admin signs in using use case 7.1 sign in flow Admin navigates to Dashboard tab on sidebar Admin views ongoing rescue table Admin views ongoing rescue map
Alternative Flows:	-
Exceptions:	-
Includes:	Webapp sign in
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	7.3		
Use Case Name:	View general statistics		
Created By:	Ryan Taw	Last Updated By:	Ryan Taw
Date Created:	7-Feb-2022	Date Last Updated:	7-Feb-2022

Actor:	Admin, DynamoDB
Description:	Admin views useful general statistics
Preconditions:	Admin is signed in
Postconditions:	-
Priority:	MEDIUM
Frequency of Use:	-
Flow of Events:	Admin signs in using use case 7.1 sign in flow Admin navigates to Dashboard tab on sidebar Admin views useful statistics such as number of Ongoing Rescue Events, number of volunteers, number of Pending certificates Admin can also view graph of rescue events each month as well as successful, failed and no response Admin can also view graph of total users each month, split into volunteers and normal users
Alternative Flows:	-
Exceptions:	-
Includes:	Webapp sign in
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	7.4		
Use Case Name:	Remove app Users		
Created By:	Ryan Taw	Last Updated By:	Ryan Taw
Date Created:	7-Feb-2022	Date Last Updated:	7-Feb-2022

Actor:	Admin, DynamoDB
Description:	Admin removes app Users
Preconditions:	Admin is signed in
Postconditions:	-
Priority:	MEDIUM
Frequency of Use:	-
Flow of Events:	Admin signs in using use case 7.1 sign in flow Admin navigates to Administrative tab on sidebar Admin views Users table which lists all Users Admin can query for a specific User by their name and click the "Remove" button beside their entry to remove them from DynamoDB
Alternative Flows:	-
Exceptions:	-
Includes:	Webapp sign in
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-

Use Case ID:	7.5		
Use Case Name:	Approve pending CPR certificate		
Created By:	Ryan Taw	Last Updated By:	Ryan Taw
Date Created:	7-Feb-2022	Date Last Updated:	7-Feb-2022

Actor:	Admin, DynamoDB, AWS lambda
Description:	Admin approves or rejects CPR certification
Preconditions:	Admin must be able to access the webapp online Admin must have an webapp account Admin must be signed in
Postconditions:	-
Priority:	MEDIUM
Frequency of Use:	-
Flow of Events:	Admin signs in using use case 7.1 sign in flow Admin navigates to Administrative tab on sidebar Admin views Pending Certificates table which lists all pending certificates sent by potential volunteer Admin can view each certificate individually by clicking on the table entry A popup dialog will appear with the image of the certificate sent by the potential volunteer and choose from two buttons to "Approve" or "Reject" the certificate
Alternative Flows:	-
Exceptions:	-
Includes:	Webapp sign in
Special Requirements:	-
Assumptions:	-
Notes and Issues:	-