Test Case Document

Project Name: QR and Face Recognition-Based Room Access System

Module: User Application

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Document Version: 1.0

Test Cases for User Mobile App

Test Scenario ID: TS_001

Test Scenario: Test login functionality

Test Case ID	Test Case	Pre-Conditio n	Test Steps	Test Data	Expected Result	Post Condition	Actual Result	Stat us
TC_001	Login with valid email and password	Admin has created an account with valid email and password	1. Enter a valid email in the email field. 2. Enter the correct password in the password field. 3. Click 'Login'	Valid email: "afraarar m@gmail .com" Password : "123456"	User is redirected to the dashboard and Popup notification: "Logged In Successfully" displayed at the top	User dashboar d is displayed	User is redirected to the dashboard and Popup notificatio n: "Logged In Successfull y" displayed at the top	Pass
TC_002	Attempt login with a valid email and invalid password	Admin has created an account with a valid email	1. Enter a valid email in the email field 2. Enter an incorrect password in the password field 3. Click 'Login'	Valid email: "afraarar m@gmail .com" Invalid password : "11111"	User remains on the login page Popup notification: "Invalid email or password" displayed at the top	Stays on login page	User remains on the login page Popup notificatio n: "Invalid email or password" displayed at the top	Pass
TC_003	Attempt login with blank email and/or password fields	None	1. Leave the email and/or password field blank	None	User remains on the login page	Stays on login page	User remains on the login page	Pass

			2. Click 'login'		Validation error: "Please fill out these fields"		Validation error: "Please fill out these fields")	
TC_004	Attempt login with an invalid email and correct password	None	1. Enter an invalid email in the email field 2. Enter a correct password in the password field 3. Click 'Login'	Invalid email: "testuser @gmail.c om" Valid password : "123456"	User remains on the login page Popup notification: "User not found" displayed at the top	Stays on login page	User remains on the login page Popup notificatio n: "User not found" displayed at the top	Pass
TC_005	Attempt login with an invalid email and incorrect password	None	1. Enter an invalid email in the email field 2. Enter an incorrect password in the password field 3. Click 'Login'	Invalid email: "testuser @gmail.c om" Invalid password : "11111"	User remains on the login page Popup notification: "User not found" displayed at the top	Stays on login page	User remains on the login page Popup notificatio n: "User not found" displayed at the top	Pass

Test Scenario: Test logout functionality

Test	Test	Pre-Condit	Test Steps	Test	Expected	Post Condition	Actual	Stat
Case ID	Case	ion		Data	Result		Result	us
TC_006	Click Logout button to log out success fully	User is logged in and on the "My Profile" page	1. Navigate to the "My Profile" page 2. Click the "Logout" button	None	User is logged out successfully and redirected to the login page	User is redirected to the login page	User is logged out and redirected to login page	Pass

Test Scenario ID: TS_003

Test Scenario: Test Face ID Registration functionality

Test Case ID	Test Case	Pre-Con dition	Test Steps	Test Data	Expected Result	Post Condition	Actual Result	Status
TC_007	Submit valid face image	User is logged in and on "My Profile" page	1. Navigate to "My Profile" page 2. Click on the "Face ID" tab to move to the Face Registratio n page 3. Select "Guest" as the role 4. Click "Start Camera"	Valid image	Message: "Image Uploaded Successfully, Registration Success"	User's face is registered successfully and stay in the Face Registration page	Message: "Image Uploaded Successfull y, Registratio n Success"	Pass

			5. Ensure a clear face is visible 6. Click "Capture Image" 7. Click "Submit"					
TC_008	Recaptu re face image	User is logged in and on Face Registra tion page	1. Navigate to "Face Registratio n" page 2. Select "Guest" as the role 3. Click "Start Camera" 4. Ensure face is visible 5. Click "Capture Image" 6. Click "Recapture " 7. Capture a new image 8. Click "Submit"	Valid recaptu red image	Message: "Image Uploaded Successfully, Registration Success"	User's face is registered successfully and stay in the Face Registration page	Message: "Image Uploaded Successfull y, Registratio n Success"	Pass

TC_009	Submit face image without capturin g	User is logged in and on Face Registra tion page	1. Navigate to "Face Registratio n" page 2. Select "Guest" as the role 3. Do not click "Start Camera" or "Capture Image" 4. Click "Submit"	None	Error message: "Please provide User ID, Role, and capture an image."	No face is registered and stay in the Face Registration page	Error message: "Please provide User ID, Role, and capture an image."	Pass
TC_010	Face already register ed for another account	A face is already register ed for another account	1. Navigate to "Face Registratio n" page 2. Select "Guest" as the role 3. Click "Start Camera" 4. Capture the registered face 5. Click "Submit"	Registe red face for another account	Error message: "Face already registered under the name (User ID for that face will shown here)"	No face is registered	Error message: "Face already registered under the name (User ID for that face will shown here)"	Pass

TC_011	Register more than 5 face images	User has register ed 5 images already	1. Navigate to "Face Registratio n" page 2. Select "Guest" as the role 3. Click "Start Camera" 4. Capture the face 5. Click "Submit" 6. Repeat steps until 6th submission	More than 5 submis sions	Error message: "Maximum time registered"	No additional face is registered	Error message: "Maximum time registered"	Pass
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Test Scenario: Test Ask Permission and My Permissions functionality

Test Case ID	Test Case	Pre-Co nditio n	Test Steps	Test Data	Expected Result	Post Condition	Actual Result	Status
TC_012	Submit valid Ask Permissio n request for Access Room	User is logged in and on "Ask Permis sion" page	1. Navigate to "Ask Permission" page 2. Select the Door 3. Pick a valid Date 4. Enter "In Time" and "Out Time" 5. Type a purpose message 6. Click "Submit"	Valid data for all fields	Popup: "Permissio n request submitted successfull y!" User is redirected to the "My Permission s" page "Pending" tab	Request is created successfull y and appears in Pending tab	Popup: "Permission request submitted successfully!" Redirected to "Pending" tab	Pass
TC_013	Submit request with missing fields	User is logged in and on "Ask Permis sion" page	1. Navigate to "Ask Permission" page 2. Leave one or more fields empty 3. Click "Submit"	Missing required fields	Error message: "All fields are required"	Request is not submitted	Error message: "All fields are required"	Pass

TC_014	Verify request in "Pending" tab	Permis sion request is already submit ted	1. Navigate to "My Permission s" page 2. Click on "Pending" tab	Submitt ed permissi on request	The request details are displayed in the "Pending" tab	Request is visible in the "Pending" tab	The request details are displayed in the "Pending" tab	Pass
TC_015	Verify request in "Approved " tab	Reques t is approv ed by admin	1. Navigate to "My Permission s" page 2. Click on "Approved" tab	Approve d permissi on request	The request details are displayed in the "Approved" tab	Request is visible in the "Approved " tab	The request details are displayed in the "Approved" tab	Pass
TC_016	Verify request in "Denied" tab	Reques t is denied by admin	1. Navigate to "My Permission s" page 2. Click on "Denied" tab	Denied permissi on request	The request details are displayed in the "Denied" tab	Request is visible in the "Denied" tab	The request details are displayed in the "Denied" tab	Pass
TC_017	Cancel Pending Ask Permissio n request	Reques t exists in the "Pendi ng" tab	1. Navigate to "My Permission s" page 2. Click on "Pending" tab 3. Click "Cancel Permission" button	Pending permissi on request	Popup: "Permissio n request deleted successfull y!" The request is removed from the "Pending" tab	Request is deleted successfull y and that request won't be in the pending tab	Popup: "Permission request deleted successfully!" The request is removed from the "Pending" tab	Pass

Test Scenario: Test Contact Us functionality

Test Case ID	Test Case	Pre-Con dition	Test Steps	Test Data	Expected Result	Post Condition	Actual Result	Status
TC_016	Send a message through the Contact Us page successf ully	None	1. Enter a valid message in the Feedback section 2. Click 'Send Message' button	A valid message (e.g., "Suggestio ns for improvem ent")	Popup message: "Message Sent Successfull y"	Message sent to the admin	Popup message: "Message Sent Successfully"	Pass
TC_017	Attempt to send an empty message	None	1. Leave the Feedback section empty 2. Click 'Send Message' button	No data entered	Error: "Feedback message cannot be empty"	No message is sent	Error: "Feedback message cannot be empty"	Pass

Test Scenario ID: TS_006

Test Scenario: Test Change Username functionality

Test Case	Test Case	Pre-Con dition	Test Steps	Test Data	Expected Result	Post Condition	Actual Result	Status
ID								

Test Scenario: Test Change Password functionality

Test Case ID Case		Steps Test Data	1 -	Post Condition	Actual Result	Status
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TC_020	Change passwo rd success fully	User is logged into the profile page	1. Enter the correct old password 2. Enter a valid new password 3. Re-enter the new password 4. Click 'Change Password' button	Old Password: "old123" New Password: "new456"	Popup message: "Password Changed Successfully" Use the new password for the next login	Password updated successfull y	Popup message: "Password Changed Successfully " New password works on login	Pass
TC_021	Attemp t to change passwo rd with incorre ct old passwo rd	User is logged into the profile page	1. Enter an incorrect old password 2. Enter a valid new password 3. Re-enter the new password 4. Click 'Change Password' button	Old Password: "wrong12 3" New Password: "new456"	Error: "Incorrect Old Password"	Password not updated	Error: "Incorrect Old Password"	Pass

TC_022	Attemp t to change passwo rd with mismat ched new passwo rds	User is logged into the profile page	1. Enter the correct old password 2. Enter a valid new password 3. Enter a different new password in the re-enter field 4. Click 'Change Password' button	Old Password: "old123" New Password: "new456" Re-enter: "new789"	Error: "New Passwords Do Not Match"	Password not updated	Error: "New Passwords Do Not Match"	Pass
TC_023	Attemp t to change passwo rd with empty fields	User is logged into the profile page	1. Leave one or more fields (Old Password, New Password, or Re-enter) empty 2. Click 'Change Password' button	No data entered	Error: "All Fields Are Required"	Password not updated	Error: "All Fields Are Required"	Pass

Test Scenario: Test Profile Picture Change functionality

Test Case ID	Test Case	Pre-Con dition	Test Steps	Test Data	Expected Result	Post Condition	Actual Result	Status
TC_024	Successf ully change profile picture	User is logged into the profile page	1. Click the 'Edit' button on the profile picture 2. Select a valid image from the device 3. Confirm the selection	Image File: "profile_pi c.jpg"	Popup message: "Profile Picture Updated Successfully " Updated profile picture is displayed	Profile picture updated	Popup message: "Profile Picture Updated Successfully " Updated profile picture is displayed	Pass
TC_025	Attempt to upload unsuppo rted file type	User is logged into the profile page	1. Click the 'Edit' button on the profile picture 2. Select a file that is not an image (e.g., .txt or .pdf) 3. Try to confirm the selection	File Type: "documen t.pdf"	Error: "Unsupporte d File Format"	Profile picture not updated	Error: "Unsupporte d File Format"	Pass

TC_026	Attempt to upload an image larger than allowed size	User is logged into the profile page	1. Click the 'Edit' button on the profile picture 2. Select an image larger than the maximum allowed size 3. Try to confirm the selection	Image File: "large_im age.jpg" (Size > 5 MB)	Error: "Image Size Exceeds the Maximum Limit"	Profile picture not updated	Error: "Image Size Exceeds the Maximum Limit"	Pass
TC_027	Attempt to upload without selecting an image	User is logged into the profile page	1. Click the 'Edit' button on the profile picture 2. Do not select any file 3. Try to confirm without choosing an image	No file selected	Error: "No Image Selected"	Profile picture not updated	Error: "No Image Selected"	Pass

Test Scenario: Test QR Scanning Functionality

Test Case	Test Case	Pre-Conditio	Test Steps	Test Data	Expected	Post	Actual	Stat
ID		n			Result	Conditio	Result	us
						n		
TC_028	Scan The Door QR Code	Need to get permission for specific door Camera should be working	Click "Scan QR"	QR Code	Gain Access for Specific Door	Should Unlock the "Face Scan" Button	Successfull y Granted Access	Pass
TC_029	Scan The Door QR Code	Without Getting Door Permission	Click "Scan QR"	QR Code	Deny Access For Specific Door	Should not Unlock the "Face Scan" Button	Denied Giving Access	Pass

Test Scenario ID: TS_010

Test Scenario: Test Face Scanning Functionality

Test Case ID	Test Case	Pre-Conditio n	Test Steps	Test Data	Expected Result	Post Conditio n	Actual Result	Stat us
TC_030	Scan The Face	User should register the face Camera should be working	Click "Scan Face"	Face	Validate the user and should Recognize	Should Unlock the "Unlock door" Button	Successfull y Validated the Face	Pass

TC_031	Scan The Face	Without	Click "Scan	Face	Deny	Should	Denied	Pass	l
		Registering	Face"		Access For	not	Giving		l
		User Face			Unlock	Unlock	Access the		l
					Door	the "Face	"Unlock		l
					Button	Scan"	Button"		l
						Button			l
									l

Test Scenario: Test Unlock Door Functionality

Test Case ID	Test Case	Pre-Conditio n	Test Steps	Test Data	Expected Result	Post Conditio n	Actual Result	Stat us
TC_032	Unlock The Door	Should Connect MQTT Broker Successfully	Click "Unlock Door"	None	Should send MQTT message to iot device Retrieve Updated Entry Time on "LogBook" Page Last Accessed Room and Dashboard	Should Relocate to Home Page Should Update User Entry Time	Successfull y Sent MQTT message and Updated Ent	Pass

Test Scenario: Test Leave Room Functionality

Test Case ID	Test Case	Pre-Conditio n	Test Steps	Test Data	Expected Result	Post Conditio n	Actual Result	Stat us
TC_033	Leaving The Room	User should Attend that room	Click "Leave Now" Button	None	Should Update Exit Time Retrieve Updated Exit Time on "LogBook" Page Last Accessed Room and Dashboard	Should Remove Giving Access To Click "Leave Now" Button Again	Updated The Exit Time Display on "LogBook" and Dashboard	Pass
TC_034	Leaving The Room	Already Left	Click "Leave Now" Button	None	Deny Access For Leave again	None	Denied Giving Access the "Leave Now" Button	Pass