Test Case Specification
eTimely

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Introduction

- Testing will pass if all expected results / postconditions are met after a test is run
- Testing will fail if any results / postconditions are not met, or are different than expected
- Entry/Exit Criteria: Begin each phase on after another, exit when all tests pass
- Suspension/Resumption Criteria: If a test fails, suspend testing and resume after investigation
- Risks/Issues: Incorrect data input, as well as database limitations

Database Setup

DBS-00 – Entirely clearing the database

DBS-01 – Creating a verified business account

DBS-02 – Creating a verified staff account

DBS-03 – Creating but *not* verifying a business account

DBS-04 – Entering 3 availabilities for a staff user

DBS-05 – Creating but *not* verifying a staff account

DBS-06 – Entering a single availability for a staff user

DBS-07 – Entering 7 availabilities for a staff user

Functional Testing Approach

Test Case ID	Title	Description
TC-2	Business Sign Up with Existing Email	Test creating a business account with an existing email
TC-16	Announcement Creation	Test creating an announcement on the "Create Announcement" with valid input.
TC-58	Schedule Creation: Schedule an Employee that is Available	Create a shift for an employee during the time that they are available.

○ Testing each all functionalities in any possible case

○ Clearing database before each test, then adding specific data if needed

Test Case ID: TC-2	Test Case Name: Business Sign Up with Existing Email
Created By: Samia Chowdhury	**Date Created:** 4/2/2022
Last Updated By: Chris Gumieny	**Last Revision Date:** 4/3/2022

Priority	High
Preconditions	User is on the business sign up page
Postconditions	User is unable to create a business account
Test Steps	1. Navigates to the sign-up page 2. Enter "eTimelyTest" in the company name field 3. Enter "etimelyTest@gmail.com" in the company email field 4. Enter "Pass1234" in the password and confirm password field 5. Check the "Agree to Terms and Conditions" checkbox 6. Click "Create Account" to create a new business account
Expected Results	• An error message displays saying "Email is already in use" • User is prompted to use a different email that isn't already in use • Business account cannot be created with an existing email address

Functional Test Case:

Business Sign Up with Existing Email

Test Case ID: TC-16	Test Case Name: Announcement Creation
Created By: Matt Korte	**Date Created:** 4/2/2022
Last Updated By: Matt Korte	**Last Revision Date:** 4/3/2022
Priority	Medium
Preconditions	• DBS-00 • DBS-01 • Signed into account created in DBS-01
Postconditions	New announcement is uploaded to database
Test Steps	1. Navigate to the announcements page 2. Enter "This is an announcement" in the title field 3. Enter "This announcement is being written as a test to ensure that this functionality is working as expected" details section 4. Press the "Send" button
Expected Results	• Announcement is added to the database • Announcement should be able to be viewed by the business user as well as all associated staff user on the announcement view page • The page is refreshed, and the form entries are cleared

Functional Test Case:

Announcement Creation

Test Case ID: TC-58	Test Case Name: Schedule an Employee that is Available
Created By: Chris Gumieny	Date Created: 4/1/2022
Last Updated By: N/A	Last Revision Date: N/A
Priority	High
Preconditions	• DBS-00, DBS-01, and DBS-02 have been completed • Perform steps of TC-45 • User is signed into account created in DBS-01
Postconditions	The shift is added to the database.
Test Steps	1. Click on the "Tech Support" tab on the schedule. 2. Click on the timeslot for April 20, 2022, at 8:00am. 3. In the "Employee" dropdown, select "Dave Smith (Tech Support)." 4. Click the "Confirm" button. 5. Wait 2 seconds for the "Success" message to disappear.
Expected Results	• An alert that says "Success! Shift has been saved." • The window refreshes the schedule page. • The newly added shift is shown in the "Tech Support" tab on April 20, 2022.

Functional Test Case:

Schedule an Available Employee

Non-Functional Testing Approach

Test Case ID	Title	Description
TC-73	Business Account Password Encryption	All passwords for business accounts that are saved in the database will be hashed with the bycrpt algorithm to ensure we are securely saving users password.

○ Non-functional testing will test all the features performance, reliability, security, and portability to ensure the application will work as intended. Individuals testing the system will follow the instructions for each test case detailed in this section.

Test Case ID: TC-73	Test Case Name: Business Account Password Hashing
Created By: Caleb Obi	Date Created: 4/1/2022
Last Updated By: Chris Gumieny	Last Revision Date: 4/3/2022
Priority	High
Preconditions	• DBS-00 • DBS-01
Postconditions	The hashed password will be shown in the firebase console.
Test Steps	1. Enter "eTimelyTest" in the "Company Name" field. 2. Enter etimelyTest@gmail.com into the "Email" field. 3. Enter "Pass1234" into the "Password" and "Confirm Password" fields.
Expected Results	• The hashed password will be shown in the firebase console.

Non-Functional Test Case:

Password Encryption

Integration Testing Approach

Test Case ID	Title	Description
TC-77	Generating JWT Access Token for Authentication - Successful	Attempt to login into the eTimely application and verify that JWT generates an access token that will be sent

○ Integration testing will test all the modules and components and external software utilized in eTimely web application to ensure they work as intended when integrated into our application.

Test Case ID: TC-77	Test Case Name: Generating JWT Access Token for Authentication - Successful
Created By: Caleb Obi	Date Created: 4/1/2022
Last Updated By: Chris Gumieny	Last Revision Date: 4/5/2022
Priority	Low
Preconditions	User on sign in page
Postconditions	Stored access tokens in local storage
Test Steps	1. Navigate to the home page 2. Click on "Sign In" button in the home page 3. Enter "etimelyTest@gmail.com" in the email address field. 4. Enter "Pass1234" in the password field 5. Check local storage for generated access token
Expected Results	• Json web tokens (JWT) will generate a one-time access token • The access token will be stored in the user's local storage. • The access token will be checked for permissions to access pages in the application.

Integration Test Case:

Generating JWT Access Token

System Testing Approach

Test Case ID	Title	Parameters	
TC-90	Business User: Invite Staff Member	First Name:	Dave
		Last Name:	Smith
		Email:	etimelyStaff@gmail.com
		Role:	Manager
TC-100	Staff User: Sign Up	Password:	Test1234

- System testing will include tests of all functionalities from start to finish using specified parameters. This is to ensure that the eTimely web application as a whole works as intended.

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Test Case ID: TC-90	Test Case Name: Business User: Invite Staff Member
Created By: Chris Gumieny	Date Created: 4/4/2022
Last Updated By:	Last Revision Date:
Priority	High
Preconditions	Follow the steps in TC-85.
Postconditions	• The entered information is added to the database under an "Inactive" user. • An invitation email is sent to the submitted email.
Parameters	• First Name: the first name of the invited staff member • Last Name: the last name of the invited staff member • Email: the email of the invited staff member • Role: the assigned role of the invited staff member
Test Steps	1. On the sidebar, click the "Team" tab and then click the "Team Management" tab. 2. Click the "Invite Staff Member" button. 3. Enter [First Name] in the "First Name" field. 4. Enter [Last Name] in the "Last Name" field. 5. Enter [Email] in the "Email" field. 6. Select [Role] in the "Role" field. 7. Click the "Invite" button. 8. Click the "OK" button on the alert.
Expected Results	• An alert that says, "Success, Invitation was sent successfully." • The invited user appears on the team table.

System Test Case:

Invite Staff Member

Test Case ID: TC-100	Test Case Name: Staff User: Sign Up
Created By: Chris Gumieny	Date Created: 4/4/2022
Last Updated By:	Last Revision Date:
Priority	High
Preconditions	Follow the steps in TC-90.
Postconditions	The staff account is now identified as "Active" in the database, and the user will now be able to log in normally.
Parameters	Password: the password for the newly created staff account
Test Steps	1. In the invitation email, click the "Set your password" button. 2. Enter [Password] into the "Password" and "Confirm Password" fields. 3. Click the "I agree to the Terms and Conditions" check box. 4. Click the "Set my password" button.
Expected Results	The user is taken to the login page.

System Test Case:

Staff Sign Up

QUESTIONS