

MUSTAFA SELMAN GÜNEŞ

SWE 573 SOFTWARE DEVELOPMENT PRACTICE

20/12/2025

THE HIVE : COMMUNITY TIME EXCHANGE PLATFORM

GIT URL : <https://github.com/squnes16/573repo>

GIT TAG URL : <https://github.com/squnes16/573repo/releases/tag/v0.9>

HONOR CODE

Related to the submission of all the project deliverables for the Swe573 Fall 2025 semester project reported in this report, I Mustafa Selman Güneş declare that:

- I am a student in the Software Engineering MS program at Bogazici University and am registered for Swe573 course during the Fall 2025 semester.
- All the material that I am submitting related to my project (including but not limited to the project repository, the final project report, and supplementary documents) have been exclusively prepared by myself.
- I have prepared this material individually without the assistance of anyone else with the exception of permitted peer assistance, which I have explicitly disclosed in this report.

Mustafa Selman Güneş

GIT RELEASE URL : <https://github.com/squnes16/573repo/releases/tag/v0.9>

GIT REPO URL : <https://github.com/squnes16/573repo>

DEPLOYMENT URL : <https://hive.selmangunes.com>

Demo Video Link :

<https://drive.google.com/file/d/1yuSsdI FqLfE2MmjSmWLjWf323jYk1VGp/view?usp=sharing>

TEST USERS:

USER | test@example.com | Test12345

USER ahmet.yilmaz@example.com	V4ljWlyU8liP
USER zeynep.kaya@example.com	vnbt4t5AEmE3
USER mehmet.demir@example.com	z7aSoU6TgBhC
USER ayse.sahin@example.com	VMbQ5v7qLReO
USER can.ozturk@example.com	asUz4eM5MFAS
USER elif.arslan@example.com	HZNhQNgX38xp
USER burak.celik@example.com	QvEVopMMhxoZ
USER denizyildiz@example.com	ovlowNTvBQdx
USER seda.kara@example.com	c1tfwJqXL5wD
USER emre.bulut@example.com	5tbfYmDl35cj
ADMIN admin@hive.com	g6lYvOl7cG9

Overview.....	4
Srs Documents.....	4
Design Documents.....	4
UI.....	4
Diagrams.....	4
Status of the Project.....	4
Status of Deployment.....	24
Installation Instructions.....	25
User manuals.....	25
Use case of demo exchange.....	25
Test plan and results.....	25

Project Details

Overview

The Hive was designed as a community time exchange project. The main purpose of the website is to facilitate users offering and requesting services to each other without the use of fiat money. During the implementation process of this website, starting with the software requirements phase, an end-to-end functional website that meets most of the requirements was delivered within 14 weeks. The Django framework was used for the backend, while Vite + React was used for the frontend. Docker was also used to simplify the deployment processes. Postgres + redis + minio were used as third-party databases in the application, and there will be no licensing issues when used in open source projects. Additionally, Mapbox and Resend infrastructures were used for map functions and mail services. Both services offer free tiers, and if the application needs to be scaled in the future, a certain payment will be required. The application is designed to be deployed on Linux servers.

Srs Documents

Srs Document can be found below link

<https://github.com/sgunes16/573repo/blob/main/deliverables/DIAGRAMS.md>

Design Documents

UI

Ui designs can be found below link

<https://www.figma.com/proto/TOzQib3ZtEla9t9K36ra/Chakra-UI-Figma-Kit--Community--?node-id=2103-215&t=JzxFoZgnHNsqQOQp-1>

Diagrams

Diagrams can be found below link

<https://github.com/sgunes16/573repo/blob/main/deliverables/DIAGRAMS.md>

Status of the Project

ID	Requirement	IS_COMPLETED	IS_TESTED	IS_DEPLOYED	IS_DOCUMENTED	TESTS
FR-1	A registered user shall be able to create a new offer with a title and description.	TRUE	TRUE	TRUE	TRUE	test_create_offer_success

FR-2	A registered user shall be able to optionally add tags to an offer.	TRUE	TRUE	TRUE	TRUE	test_create_offer_with_tags
FR-3	A registered user shall be able to upload images associated with the offer.	TRUE	FALSE	TRUE	TRUE	
FR-4	The system shall save offers and display them in the public feed.	TRUE	FALSE	TRUE	TRUE	
FR-5	Users shall only be able to edit or delete their own offers.	TRUE	TRUE	TRUE	TRUE	test_update_own_offer, test_update_others_offer_fails
FR-5a	A registered user shall be able to delete their own offer.	TRUE	TRUE	TRUE	TRUE	test_delete_own_offer_success,test_delete_others_offer_fails
FR-5b	The system shall require confirmation before deleting an offer.	TRUE	FALSE	TRUE	TRUE	
FR-5c	The system shall prevent deletion of offers with PENDING, ACCEPTED, or COMPLETED exchanges (only CANCELLED or no exchanges allowed).	TRUE	TRUE	TRUE	TRUE	test_delete_others_offer_fails, test_delete_offer_with_pending_exchange_fails, test_delete_offer_with_accepted_exchange_fails, test_delete_offer_with_completed_exchange_fails, test_delete_offer_with_cancelled_exchange_success
FR-5d	Upon offer deletion, the system shall remove associated images and data.	TRUE	TRUE	TRUE	TRUE	test_delete_image_requires_authentication
FR-6	The system shall validate that required fields are not empty before submission.	TRUE	FALSE	TRUE	TRUE	

FR-6a	The system shall prevent editing of offers with PENDING, ACCEPTED, or COMPLETED exchanges (only CANCELLED or no exchanges allowed).	TRUE	FALSE	TRUE	TRUE	
FR-6b	The system shall display edit lock status to the user when an offer cannot be edited.	TRUE	FALSE	TRUE	TRUE	
FR-7	A registered user shall be able to create a new want with a title and description.	TRUE	TRUE	TRUE	TRUE	test_create_offer_success
FR-8	A registered user shall be able to optionally add tags to a want.	TRUE	TRUE	TRUE	TRUE	test_create_offer_with_tags
FR-9	A registered user shall be able to upload images associated with the want.	TRUE	FALSE	TRUE	TRUE	
FR-10	The system shall save wants and display them in the public feed.	TRUE	FALSE	TRUE	TRUE	
FR-11	Users shall only be able to edit or delete their own wants.	TRUE	TRUE	TRUE	TRUE	test_update_own_offer, test_update_others_offer_fails
FR-11a	A registered user shall be able to delete their own want.	TRUE	TRUE	TRUE	TRUE	test_delete_own_offer_success, test_delete_others_offer_fails
FR-11b	The system shall require confirmation before deleting a want.	TRUE	FALSE	TRUE	TRUE	

FR-11c	The system shall prevent deletion of wants with PENDING, ACCEPTED, or COMPLETED exchanges (only CANCELLED or no exchanges allowed).	TRUE	TRUE	TRUE	TRUE	test_delete_other_s_offer_fails, test_delete_offer_with_pending_ex_change_fails, test_delete_offer_with_accepted_exchange_fails, test_delete_offer_with_completed_exchange_fails, test_delete_offer_with_cancelled_exchange_success
FR-11d	Upon want deletion, the system shall remove associated images and data.	TRUE	TRUE	TRUE	TRUE	test_delete_image_requires_authentication
FR-12	The system shall validate that required fields are not empty before submission.	TRUE	FALSE	TRUE	TRUE	
FR-12a	The system shall prevent editing of wants with PENDING, ACCEPTED, or COMPLETED exchanges (only CANCELLED or no exchanges allowed).	TRUE	FALSE	TRUE	TRUE	
FR-12b	The system shall display edit lock status to the user when a want cannot be edited.	TRUE	FALSE	TRUE	TRUE	
FR-13	Both authenticated and anonymous users shall be able to view the public feed.	TRUE	FALSE	TRUE	TRUE	
FR-14	A user shall be able to search for offers and wants by title, description, tags, or location.	TRUE	FALSE	TRUE	TRUE	

FR-14a	The system shall support semantic search using tags to find related offers and wants.	FALSE	FALSE	FALSE	TRUE	
FR-14b	The system shall index offer/want titles, descriptions, and tags for efficient search.	FALSE	FALSE	FALSE	TRUE	
FR-15	A user shall be able to filter offers and wants by tags, location, or category.	FALSE	FALSE	FALSE	TRUE	
FR-16	A user shall be able to sort offers and wants by creation date, title, or location.	FALSE	FALSE	FALSE	TRUE	
FR-17	Both authenticated and anonymous users shall be able to view the details of an offer or want by clicking on it.	TRUE	FALSE	TRUE	TRUE	
FR-17a	Anonymous users shall be redirected to login when attempting to interact with offers (request exchange, message, etc.).	TRUE	FALSE	TRUE	TRUE	
FR-18	A user shall be able to create a new profile with a name and email.	TRUE	TRUE	TRUE	TRUE	test_register_valid_password_successes,test_register_with_first_last_name,test_registerCreates_unverified_user
FR-19	A user shall be able to optionally add a profile picture to their profile.	TRUE	FALSE	TRUE	TRUE	

FR-20	A user shall be able to edit or delete their own profile after onboarding.	TRUE	TRUE	TRUE	TRUE	test_update_profile_bio test_update_profile_location test_update_profile_skills test_update_profile_phone_number test_update_user_names test_update_profile_multiple_fields
FR-21	Profiles shall include timestamps for creation and last modification.	TRUE	FALSE	TRUE	TRUE	
FR-22	The system shall prevent unauthorized users from creating or editing profiles.	TRUE	FALSE	TRUE	TRUE	
FR-27	A user shall be able to view their transaction history.	TRUE	TRUE	TRUE	TRUE	test_get_exchange_detail, test_get_user_transactions
FR-28	A user shall be able to view the details of a transaction by clicking on it.	FALSE	FALSE	FALSE	FALSE	
FR-29	A user shall be able to track their progress by clicking on the transaction history.	TRUE	FALSE	TRUE	TRUE	
FR-30	A user shall be able to initiate a handshake and rating process with another user.	TRUE	TRUE	TRUE	TRUE	test_create_exchange_success, test_create_exchange_requires_offer_id test_create_exchange_own_offer_fails test_create_exchange_insufficient_credits test_create_exchange_duplicate_fails

FR-31	A user shall be able to chat with the other user during the handshake and rating process.	TRUE	FALSE	TRUE	TRUE	
FR-32	A user shall be able to view the details of a handshake and rating process by clicking on it.	TRUE	TRUE	TRUE	TRUE	test_get_exchange_detail test_get_exchange_detail_non_participant_fails
FR-33	A user shall be able to track the progress of the handshake and rating process by clicking on the handshake and rating process.	TRUE	TRUE	TRUE	TRUE	test_get_exchange_detail
FR-34	The system shall display a message indicating that there are no handshake and rating processes to display.	TRUE	FALSE	TRUE	TRUE	
FR-35	The system shall prevent unauthorized users from initiating a handshake and rating process.	TRUE	TRUE	TRUE	TRUE	test_get_exchange_detail_non_participant_fails
FR-36	The system shall validate that required fields are not empty before submission.	TRUE	FALSE	TRUE	TRUE	
FR-36a	A requester shall be able to cancel their PENDING or ACCEPTED exchange.	TRUE	TRUE	TRUE	TRUE	test_cancel_exchange_success, test_cancel_accepted_exchange_success, test_cancel_with_provider_confirmed_fails

FR-36b	The system shall return blocked time credits upon exchange cancellation.	TRUE	TRUE	TRUE	TRUE	test_cancel_exchange_success
FR-36c	The system shall notify the provider when an exchange is cancelled by the requester.	TRUE	FALSE	TRUE	TRUE	
FR-36d	The system shall provide real-time updates for exchange status changes via WebSocket.	TRUE	FALSE	TRUE	TRUE	
FR-36e	A user shall be able to rate communication (1-5), punctuality (1-5), and recommendation after completing an exchange.	TRUE	TRUE	TRUE	TRUE	test_submit_rating_success, test_submit_rating_non_complete_fails test_submit_rating_missing_fields
FR-36f	A user shall be able to add a comment with their rating.	TRUE	TRUE	TRUE	TRUE	test_submit_rating_success
FR-36g	The system shall calculate and display average ratings on user profiles.	TRUE	FALSE	TRUE	TRUE	
FR-36h	A registered user shall be able to create a group offer with multiple participant slots (person_count).	TRUE	TRUE	TRUE	TRUE	test_create_group_offer_success test_group_offer_multiple_participants
FR-36i	Group offers shall not require a proposed date for accepting exchanges.	TRUE	FALSE	TRUE	TRUE	

FR-36j	Each participant in a group offer shall have their own separate exchange.	TRUE	FALSE	TRUE	TRUE	
FR-36k	Each participant in a group offer shall confirm completion individually.	TRUE	FALSE	TRUE	TRUE	
FR-36l	The provider shall receive time credits only once when the first participant completes (subsequent completions burn credits).	TRUE	FALSE	TRUE	TRUE	
FR-36m	For 1-to-1 offers, only one exchange can be ACCEPTED at a time.	TRUE	TRUE	TRUE	TRUE	test_accept_non_pending_fails
FR-36n	For group offers, exchanges up to person_count can be ACCEPTED simultaneously.	TRUE	FALSE	TRUE	TRUE	
FR-36o	Offers shall be hidden from dashboard when all slots are filled (ACCEPTED or COMPLETED).	TRUE	FALSE	TRUE	TRUE	test_get_offers_only_active
FR-36p	The system shall display slot availability status for group offers (e.g., "2/3 active, 1 done").	TRUE	FALSE	TRUE	TRUE	
FR-36q	Group activity type shall only be available for offers, not for wants.	TRUE	FALSE	TRUE	TRUE	

FR-36r	The requester shall not be able to cancel an exchange after the provider has confirmed completion.	TRUE	TRUE	TRUE	TRUE	test_cancel_with_provider_confirm ed_fails
FR-36s	A user shall be able to create one-time offers that are available for a single exchange.	TRUE	TRUE	TRUE	TRUE	test_accept_non_pend ing_fails
FR-36t	A user shall be able to create recurring offers that can be repeated on multiple dates.	FALSE	FALSE	FALSE	TRUE	
FR-37	A user shall be able to view their time bank.	TRUE	TRUE	TRUE	TRUE	test_get_own_pro file_success
FR-38	A user shall be able to view the details of a time bank by clicking on it.	TRUE	FALSE	TRUE	TRUE	
FR-38a	The system shall block requester's time credits when an exchange is created.	TRUE	TRUE	TRUE	TRUE	test_credit_blocking_on_exchange _request
FR-38b	The system shall display available and blocked amounts separately.	TRUE	FALSE	TRUE	TRUE	
FR-38c	The system shall unblock credits upon exchange cancellation.	TRUE	TRUE	TRUE	TRUE	test_credit_unblo cking_on_cancell ation
FR-38d	The system shall transfer credits from requester to provider upon exchange completion.	TRUE	TRUE	TRUE	TRUE	test_complete_1t o1_exchange_flo w

FR-39	A user shall be able to list the map and see the offers/wants on the map.	TRUE	FALSE	TRUE	TRUE	
FR-40	A user shall be able to view the details of an offer/want by clicking on it on the map.	TRUE	FALSE	TRUE	TRUE	
FR-41	A user shall be able to set a geo-location for their offer/want.	TRUE	FALSE	TRUE	TRUE	
FR-41a	A user shall be able to filter offers/wants by distance radius (1-20km) from their location.	TRUE	TRUE	TRUE	TRUE	test_get_offers_with_location_filter, test_get_offers_nearby_within_20km
FR-41b	A user shall be able to choose between remote (online) or in-person location type for offers/wants.	TRUE	TRUE	TRUE	TRUE	test_get_offers_remote_always_included
FR-41c	The system shall display nearby offers/wants count on the map.	TRUE	FALSE	TRUE	TRUE	
FR-41d	The system shall display fuzzy/approximate locations for offers and wants on the public feed and map.	FALSE	FALSE	FALSE	TRUE	
FR-41e	The system shall offset exact coordinates by a random amount within a configurable radius (500m-1km).	FALSE	FALSE	FALSE	TRUE	

FR-41f	The system shall display neighborhood-level location names instead of exact addresses.	FALSE	FALSE	FALSE	TRUE	
FR-41g	The system shall reveal exact location only after an exchange is accepted.	FALSE	FALSE	FALSE	TRUE	
FR-41h	Remote offers shall be excluded from location-based filtering but always visible.	TRUE	TRUE	TRUE	TRUE	test_get_offers_remote_always_included
FR-41i	The system shall use a maximum 20km radius for backend location-based offer filtering.	TRUE	FALSE	TRUE	TRUE	
FR-41j	The system shall request user location permission and show warning if not granted.	TRUE	FALSE	FALSE	TRUE	
FR-42	A user shall be able to view their profile and see their offers, wants, and time bank.	TRUE	TRUE	TRUE	TRUE	test_get_other_user_profile
FR-43	A user shall be able to view their offers by clicking on the offers.	TRUE	TRUE	TRUE	TRUE	test_get_other_user_offers
FR-44	A user shall be able to view their wants by clicking on the wants.	TRUE	TRUE	TRUE	TRUE	test_get_other_user_wants
FR-45	A user shall be able to view their time bank by clicking on the time bank.	FALSE	FALSE	FALSE	FALSE	

FR-47	A user shall be able to see other users' profiles and see their offers, wants, ratings, and comments.	TRUE	TRUE	TRUE	TRUE	test_get_other_user_ratings, test_get_other_user_profile, test_get_other_user_wants, test_get_other_user_offers, test_get_other_user_with_comments
FR-48	A user shall be able to view their offers by clicking on the offers.	TRUE	TRUE	TRUE	TRUE	test_get_other_user_offers
FR-49	A user shall be able to view their wants by clicking on the wants.	TRUE	TRUE	TRUE	TRUE	test_get_other_user_wants
FR-50	A user shall be able to view their ratings by clicking on the ratings.	TRUE	TRUE	TRUE	TRUE	test_get_other_user_ratings
FR-51	A user shall be able to view their comments by clicking on the comments.	TRUE	TRUE	TRUE	TRUE	test_get_other_user_with_comments
FR-53	An admin shall be able to view the admin panel and see the users, offers, wants, ratings, and comments.	FALSE	FALSE	FALSE	TRUE	
FR-54	An admin shall be able to view the users by clicking on the users.	FALSE	FALSE	FALSE	TRUE	
FR-55	An admin shall be able to view the offers by clicking on the offers.	FALSE	FALSE	FALSE	TRUE	
FR-56	An admin shall be able to view the wants by clicking on the wants.	FALSE	FALSE	FALSE	TRUE	
FR-57	An admin shall be able to view the ratings by clicking on the ratings.	FALSE	FALSE	FALSE	TRUE	

FR-58	An admin shall be able to view the comments by clicking on the comments.	FALSE	FALSE	FALSE	TRUE	
FR-59	An admin shall be able to view the transactions by clicking on the transactions.	FALSE	FALSE	FALSE	TRUE	
FR-61	An admin shall be able to view the time bank by clicking on the time bank.	FALSE	FALSE	FALSE	TRUE	
FR-62	An admin shall be able to view the handshake and rating processes by clicking on the handshake and rating processes.	FALSE	FALSE	FALSE	TRUE	
FR-62a	An admin shall be able to view KPI dashboard with total users, exchanges, and pending reports count.	TRUE	TRUE	TRUE	TRUE	test_get_kpi_success
FR-62b	An admin shall be able to issue warnings to users with a message.	TRUE	TRUE	TRUE	TRUE	test_warn_user_success
FR-62c	An admin shall be able to ban users with a reason.	TRUE	TRUE	TRUE	TRUE	test_ban_user_success
FR-62d	The system shall track warning count for each user.	TRUE	TRUE	TRUE	TRUE	test_warn_user_increments_count
FR-62e	Banned users shall not be able to log in to the platform.	FALSE	FALSE	FALSE	FALSE	
FR-62f	An admin shall be able to delete offers or wants.	FALSE	FALSE	FALSE	FALSE	

FR-62g	An admin shall be able to cancel exchanges and return blocked credits.	FALSE	FALSE	FALSE	FALSE	
FR-62h	The system shall notify affected users when content is removed or action is taken.	FALSE	FALSE	FALSE	FALSE	
FR-62i	Banned users shall not be able to create offers or wants.	TRUE	TRUE	TRUE	TRUE	test_banned_user_CANNOT_CREATE_OFFER
FR-62j	Banned users shall not be able to initiate exchanges.	TRUE	TRUE	TRUE	TRUE	test_banned_user_CANNOT_CREATE_EXCHANGE
FR-62k	Banned users' offers shall be hidden from the dashboard for non-admin users.	TRUE	TRUE	TRUE	TRUE	test_banned_user_OFFERS_NOT_SHOWN_IN_DASHBOARD
FR-62l	Exchanges cannot be initiated for offers belonging to banned users.	TRUE	TRUE	TRUE	TRUE	test_ban_user_UNBLOCKS_CREDITS_CORRECTLY
FR-62m	When a user is banned, all their pending and accepted exchanges shall be cancelled with credit refunds.	TRUE	TRUE	TRUE	TRUE	test_remove_offer_deletes_offer_and Cancels_exchanges
FR-62n	Suspended user profiles shall display "This account has been suspended" message.	TRUE	FALSE	TRUE	TRUE	
FR-62o	Suspended users' offers/wants shall be hidden from their profile page for non-admin users.	TRUE	FALSE	TRUE	TRUE	

FR-62p	Flagged offers shall only be visible to admins and the offer owner on profile pages.	TRUE	TRUE	TRUE	TRUE	test_get_offers_excludes_flagged
FR-62q	Warning count shall only be visible to admins and the user themselves.	TRUE	FALSE	TRUE	TRUE	
FR-62r	Admins shall be able to view all user content including flagged/removed items.	TRUE	FALSE	TRUE	TRUE	
FR-63	A admin shall be able to flag and report users.	TRUE	FALSE	TRUE	TRUE	
FR-64	A admin shall be able to view the flagged and reported users by clicking on the flagged and reported users.	TRUE	FALSE	TRUE	TRUE	
FR-65	A admin shall be able to view the details of a flagged and reported user by clicking on it.	TRUE	FALSE	TRUE	TRUE	
FR-66	A user shall be able to login to the platform with email and password.	TRUE	FALSE	TRUE	TRUE	
FR-67	A user shall be able to register to the platform with first name, last name, email, and password.	TRUE	TRUE	TRUE	TRUE	test_register_with_first_last_name
FR-68	A user shall be able to logout from the platform.	TRUE	FALSE	TRUE	TRUE	

FR-69	A registered user shall be able to change their password by providing current and new password.	FALSE	FALSE	FALSE	FALSE	
FR-69a	The system shall validate the current password before allowing password change.	FALSE	FALSE	FALSE	FALSE	
FR-69b	The system shall apply the same password validation rules to the new password.	FALSE	FALSE	FALSE	FALSE	
FR-69c	A registered user shall be able to permanently delete their account.	FALSE	FALSE	FALSE	FALSE	
FR-69d	The system shall require confirmation before deleting an account.	FALSE	FALSE	FALSE	FALSE	
FR-69e	Upon account deletion, the system shall remove or anonymize all user data, offers, wants, and exchanges.	FALSE	FALSE	FALSE	FALSE	
FR-69f	The system shall notify the user via email when their account is deleted.	FALSE	FALSE	FALSE	FALSE	
FR-69g	A user shall be able to logout from all devices (invalidate all sessions).	FALSE	FALSE	FALSE	FALSE	

FR-70	The system shall send notifications to users when important events occur.	TRUE	TRUE	TRUE	TRUE	test_get_notifications_success
FR-71	A user shall be able to view all their notifications.	TRUE	TRUE	TRUE	TRUE	test_get_notifications_success
FR-72	A user shall be able to mark individual notifications as read or unread.	TRUE	TRUE	TRUE	TRUE	test_mark_notification_as_read
FR-73	A user shall be able to mark all notifications as read at once.	TRUE	TRUE	TRUE	TRUE	test_mark_all_as_read
FR-74	The system shall display unread notification count in the navigation bar.	TRUE	TRUE	TRUE	TRUE	test_notification_count_in_navbar
FR-75	A user shall be able to filter notifications by read/unread status.	TRUE	TRUE	TRUE	TRUE	test_filter_notifications_by_read_status
FR-76	A user shall be able to report an offer, want, exchange, or another user.	TRUE	TRUE	TRUE	TRUE	test_report_offer_success, test_report_want_success, test_report_exchange_success
FR-77	A user shall be able to select a reason category for the report.	TRUE	TRUE	TRUE	TRUE	test_report_reason_spam
FR-78	A user shall be able to add a description to the report.	TRUE	TRUE	TRUE	TRUE	test_report_with_description
FR-79	The system shall prevent duplicate reports from the same user for the same target.	TRUE	TRUE	TRUE	TRUE	test_report_duplicate_prevented

FR-80	The system shall validate that passwords are at least 8 characters with 1 uppercase, 1 lowercase, and 1 digit.	TRUE	TRUE	TRUE	TRUE	test_validate_password_too_short, test_validate_password_no_uppercase, test_validate_password_no_lowercase, test_validate_password_no_digit, test_validate_password_valid
FR-81	The system shall send a verification email upon user registration.	TRUE	TRUE	TRUE	TRUE	test_resend_verification_success
FR-82	Unverified users shall not be able to create offers or exchanges.	TRUE	TRUE	TRUE	TRUE	test_unverified_user_cannot_create_offer
FR-83	A user shall be able to request a new verification email.	TRUE	FALSE	TRUE	TRUE	
FR-84	A registered user shall be able to view all forum topics.	TRUE	TRUE	TRUE	TRUE	def test_list_posts_public(self, api_client):
FR-85	A registered user shall be able to create a new forum topic with title and content.	TRUE	TRUE	TRUE	TRUE	def test_create_post_verified_user(self, api_client):
FR-86	A registered user shall be able to reply to forum topics.	TRUE	TRUE	TRUE	TRUE	test_add_comment_verified_user
FR-87	A registered user shall be able to like/upvote forum posts and replies.	FALSE	FALSE	FALSE	FALSE	
FR-88	A user shall be able to search forum topics by keyword.	FALSE	FALSE	FALSE	FALSE	
FR-89	A user shall be able to filter forum topics by category (General, Help, Tips, Feedback, etc.).	TRUE	FALSE	TRUE	TRUE	

FR-90	Forum posts shall display author name, avatar, and creation timestamp.	TRUE	FALSE	TRUE	TRUE	
FR-91	A registered user shall be able to edit or delete their own forum posts.	TRUE	TRUE	TRUE	TRUE	test_delete_own_post
FR-92	An admin shall be able to pin important topics to the top.	FALSE	FALSE	FALSE	FALSE	
FR-93	An admin shall be able to close topics to prevent further replies.	FALSE	FALSE	FALSE	FALSE	
FR-94	An admin shall be able to delete inappropriate forum posts or topics.	TRUE	TRUE	TRUE	TRUE	test_admin_can_delete_any_post
FR-95	The system shall notify users when someone replies to their topic.	TRUE	FALSE	TRUE	TRUE	
FR-96	A user shall be able to follow topics to receive notifications on new replies.	FALSE	FALSE	FALSE	FALSE	
FR-97	The system shall track user activities and progress towards achievements.	FALSE	FALSE	FALSE	FALSE	
FR-98	A user shall automatically earn achievements when they meet the criteria.	FALSE	FALSE	FALSE	FALSE	
FR-99	A user shall be able to view their achievement tree showing earned and locked badges.	FALSE	FALSE	FALSE	FALSE	

FR-100	A user shall be able to view progress percentage for locked achievements.	FALSE	FALSE	FALSE	FALSE	
FR-101	Achievements shall be displayed on user profiles, visible to other members.	FALSE	FALSE	FALSE	FALSE	
FR-102	The system shall send a notification when a user earns a new achievement.	FALSE	FALSE	FALSE	FALSE	
FR-103	Achievements shall be categorized: Exchange (first exchange, 5 exchanges, etc.), Time (10h given, 50h given), Community (first forum post, helpful replies), Special (early adopter, verified profile).	FALSE	FALSE	FALSE	FALSE	
FR-104	An admin shall be able to create and manage achievement definitions.	FALSE	FALSE	FALSE	FALSE	
FR-105	A user shall be able to showcase selected achievements as "featured" on their profile.	FALSE	FALSE	FALSE	FALSE	
	Coverage	%72.8	%41.0	%72.3	%83.2	

Status of Deployment

Website is deployed and dockerized.

URL : hive.selmangunes.com

Installation Instructions

Installation instructions can be found below link

<https://github.com/squnes16/573repo/blob/main/deliverables/DEPLOYMENT.md>

https://github.com/squnes16/573repo/blob/main/deliverables/DEMO_SETUP.md

https://github.com/squnes16/573repo/blob/main/deliverables/THIRD_PARTY_SETUP.md

User manuals

User manual document can be found below link

https://github.com/squnes16/573repo/blob/main/deliverables/USER_MANUAL.md

Use case of demo exchange

Use case of demo exchange documents can be found below link

https://github.com/squnes16/573repo/blob/main/deliverables/USE_CASE.md

Test plan and results

Test plan and results can be found below link

https://github.com/squnes16/573repo/blob/main/deliverables/TEST_PLAN_AND_RESULTS.md