



GROUP NAME: UNIFY

SRS Report

Project Title: **UNICIRCLE**

Course: **SOFTWARE ENGINEERING**

Section: **I**

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▼ 1. Introduction:

Project Proposal

Project name: *Uni circle.*

Description:

A platform named Uni Circle has been proposed to support university students in managing essential non-academic tasks that often interfere with their studies. Common challenges such as buying or selling used items, finding shared accommodation, or seeking tutoring assistance are typically handled through scattered and unreliable sources like social media groups or generic marketplaces. These platforms are not designed with student needs in mind, leading to confusion, wasted time, and safety concerns. Uni Circle aims to address these issues by creating a secure, student-only environment where these activities can be organized, trusted, and easily accessed. The system is designed to support three main types of users: (1) Students who want to buy or sell used items, who will be able to post, browse, negotiate, and complete transactions within a verified network, using in-app messaging and peer ratings to build trust; (2) Room seekers and providers, who can post or search for available shared rooms or housing listings, with the confidence that all users are verified students, enhancing safety and reducing risks often associated with public listings; and (3) Tutors and learners, where tutors can create profiles outlining the subjects they teach, their availability, and expected rates, while learners can post "Tutor Needed" requests, browse tutor profiles, and filter options based on ratings and scheduling preferences. All communication will take place within the platform, and student verification will be required to maintain a trusted environment. A rating and review system will help ensure transparency and accountability. By bringing together these essential services marketplace, housing, and academic support into one unified and secure system, Uni Circle is expected to reduce everyday hassle, promote peer collaboration, cut unnecessary costs, and allow students to

concentrate more on their academic goals while staying supported by a strong student network.

▼ 2. Overall Description:

▼ 1. Actors and Use Cases :

Actors: Marketplace Users ,Room seekers/Providers, Tutor, Learners, Admin.

Use Case: Login, Registration, Sell Item, Post for Sale, Buy Item, Negotiate Price, Rate, Search Rooms, Browse, Negotiate Price, Rent, Add Preference, Teach, Browse Tutor, Review Filter by Requirements, Requirements Of Teachers, Expertise Post.


▼ 2. Scopes and Features :

Scope & Features Table – Uni Circle Platform:

User Type	Scope	Core Features
Marketplace Users	Secure buying and selling of used items among verified students.	<ul style="list-style-type: none">- Register & verify account with student credentials- Post items with descriptions, images, and prices- Browse and search item listings- Negotiate prices via in-app messaging- Complete transactions safely within the student network- Rate and review buyers/sellers after transactions

Room Seekers and Providers	Safe, verified platform for finding or offering shared accommodation.	<ul style="list-style-type: none"> - Register & verify account - Post accommodation ads (location, rent, amenities) - Search & filter listings by location, price, and preferences - Add roommate preferences - Negotiate via in-app messaging - Safer arrangements with verified users
Tutors & Learners	Connects students for academic help, tutoring, and learning opportunities.	<ul style="list-style-type: none"> - Register & verify account - Tutors create detailed profiles (subjects, rates, availability) - Learners post tutor requests - Search & filter tutors by subject, ratings, and schedule - Schedule coordination between tutor & learner - Ratings & reviews after tutoring sessions
System Administrator	Maintains platform integrity, safety, and operational quality.	<ul style="list-style-type: none"> - Verify student credentials during registration - Approve or reject user accounts - Moderate content (ads, profiles, messages) - Resolve disputes and handle misconduct reports - Oversee platform security and performance

▼ **3. User Documentation :**

 Create a User Story Board (1).

As A/An	I want to	So that	Acceptance Criteria
Student	Create a profile	I can become a verified member of the UniCircle community	The user must be able to sign up using their university email and complete the verification process. An OTP is sent to the university email for verification.
Student	Log in with my credentials	The system can authenticate me and I can trust it	After a successful login, the user's data should be accessible.
Student	View and update my profile	I can manage my personal information	The user can see a list of information provided during registration and an "edit profile" button to make changes.
Student	Search for items	I can find what I need to buy	The user can search for items by keywords, categories, or price range.
Student	Create a post to sell an item	I can sell my used items to other students	The user can upload photos, provide a description, and set a price for the item they want to sell.
Student	Browse listings for housing	I can find a place to live or a roommate	The user can filter housing listings by rent, location, and number of roommates.
Student	Post a listing for housing	I can find a roommate or a tenant for my place	The user can create a post with details about the accommodation, including rent, location, and contact information.

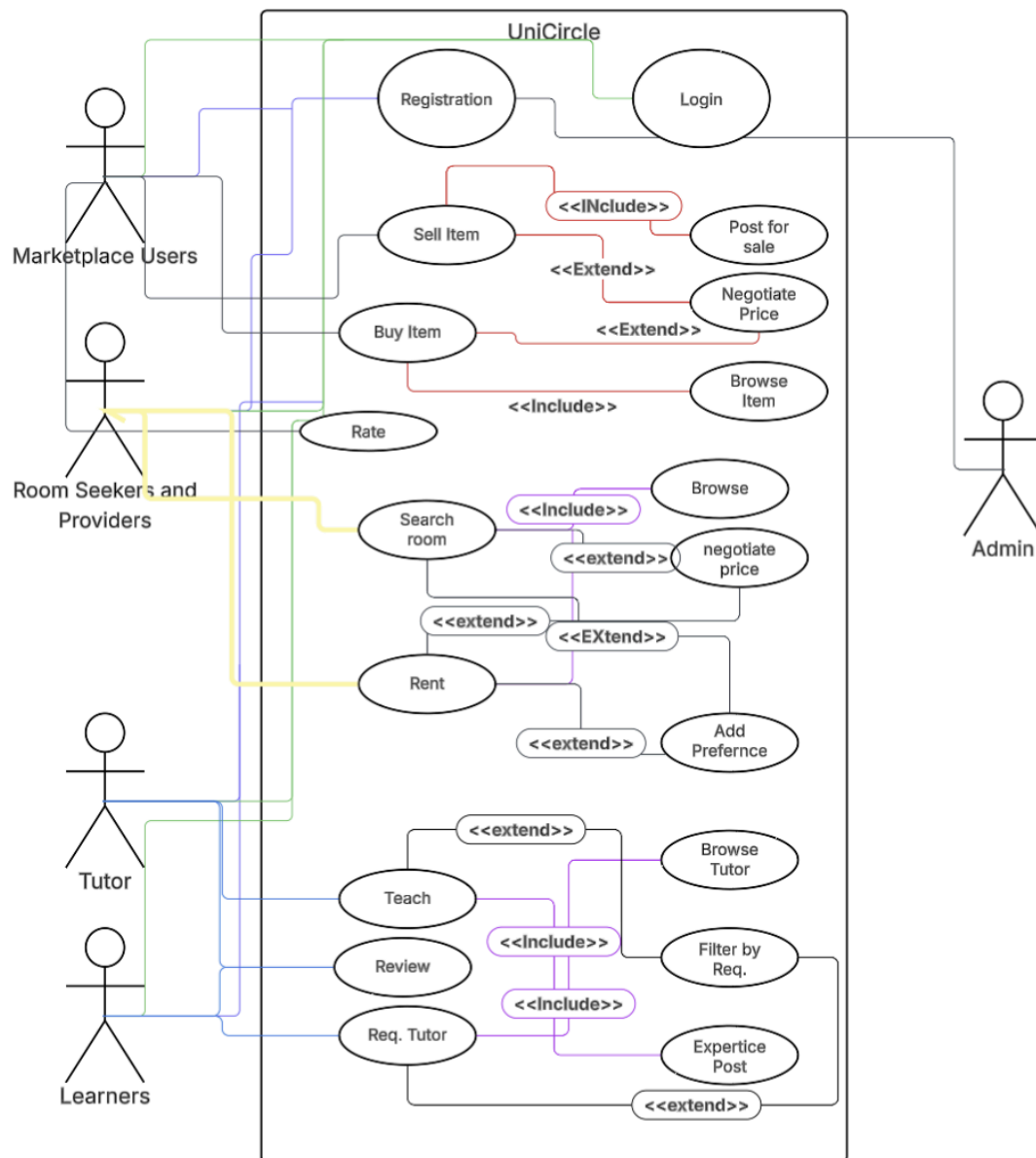
As A/An	I want to	So that	Acceptance Criteria
Student	Search for a tutor	I can get academic help	The user can search for tutors based on the subject, availability, and their reviews.
Student	Create a tutor profile	I can earn money by tutoring	The user can specify subjects they can teach, their schedule, and their expected fees.
Student	Chat with another user	I can communicate safely with potential buyers, sellers, or tutors	The user can send and receive messages within the application without sharing personal contact information.
Student	Leave a review and rating for another user	I can provide feedback and contribute to the platform's trust system	The user can rate a transaction or a tutoring session and leave comments for the other user.
Student	Request a new password	I do not permanently lose access to my data if I forget my password	An OTP is sent to the user's university email to reset the password.
Student - Room Seeker/Provider	Log in with my credentials	The system can authenticate me and I can trust it	After a successful login, the user's data should be accessible.
Student - Room Seeker/Provider	Browse listings for housing	I can find a place to live or a roommate	The user can filter housing listings by rent, location, and number of roommates.
Student - Room Seeker/Provider	Post a listing for housing	I can find a roommate or a tenant for my place	The user can create a post with details about the accommodation, including rent, location, and contact information.

As A/An	I want to	So that	Acceptance Criteria
Student - Room Seeker/Provider	Chat with another user	I can communicate safely with potential roommates or landlords	The user can send and receive messages within the application without sharing personal contact information.
Student - Room Seeker/Provider	Leave a review and rating for another user	I can provide feedback and contribute to the platform's trust system	The user can rate their interaction and leave comments for the other user.
Student - Room Seeker/Provider	Request a new password	I do not permanently lose access to my data if I forget my password	An OTP is sent to the user's university email to reset the password.
Student - Tutor	Log in with my credentials	The system can authenticate me and I can trust it	After a successful login, the user's data should be accessible.
Student - Tutor	Create a tutor profile	I can earn money by tutoring	The user can specify subjects they can teach, their schedule, and their expected fees.
Student - Tutor	Respond to tutoring requests	I can find students who need my help	The user can view "Tutor Needed" requests and contact the student through the in-app chat.
Student - Tutor	Chat with a learner	I can communicate safely with potential students	The user can send and receive messages within the application without sharing personal contact information.
Student - Tutor	Leave a review and rating for	I can provide feedback and	The user can rate a tutoring session and

As A/An	I want to	So that	Acceptance Criteria
	another user	contribute to the platform's trust system	leave comments for the other user.
Student - Tutor	Request a new password	I do not permanently lose access to my data if I forget my password	An OTP is sent to the user's university email to reset the password.
Student - Learner	Log in with my credentials	The system can authenticate me and I can trust it	After a successful login, the user's data should be accessible.
Student - Learner	Search for a tutor	I can get academic help	The user can search for tutors based on the subject, availability, and their reviews.
Student - Learner	Create a "Tutor Needed" request	I can find a tutor who fits my specific needs	The user can publish a request with their learning preferences, subject, and availability.
Student - Learner	Chat with a tutor	I can communicate safely with potential tutors	The user can send and receive messages within the application without sharing personal contact information.
Student - Learner	Leave a review and rating for another user	I can provide feedback and contribute to the platform's trust system	The user can rate a tutoring session and leave comments for the other user.
Student - Learner	Request a new password	I do not permanently lose access to my data if I forget my password	An OTP is sent to the user's university email to reset the password.

As A/An	I want to	So that	Acceptance Criteria
System Administrator	View and manage user profiles	I can maintain security and integrity of the platform	The admin can see a list of all users and has the ability to suspend or ban users who violate the community guidelines.
System Administrator	Monitor posts and listings	I can ensure all content is appropriate and follows the rules	The admin can review and remove posts that are reported or found to be inappropriate.
System Administrator	Manage reports from users	I can address issues and maintain a secure environment	The admin can receive and investigate user reports about fraudulent activity or inappropriate behavior and take necessary actions.
System Administrator	View system analytics	I can understand how the platform is being used	The admin can access data on user activity, popular listings, and engagement metrics.

▼ 4. Use Case Diagram :



https://lucid.app/lucidchart/e6402de9-4253-416f-b83b-27731adb23d1/edit?viewport_loc=-1418%2C-99%2C1364%2C613%2C0_0&invitationId=inv_6041a7c9-e805-490d-9a49-58d4ffb092ff

▼ 5. System Functions :

1. User Account Management

- *Create profile (with university email verification via OTP)*
- *Log in with credentials (authentication)*
- *View and update profile information*
- *Request password reset (OTP sent to university email)*

2. Marketplace (Items)

- *Search for items (by keywords, categories, price range)*
- *Create post to sell an item (upload photos, add description, set price)*

3. Housing Listings

- *Browse housing listings (filter by rent, location, number of roommates)*
- *Post a housing listing (add rent, location, contact details)*

4. Tutoring

- *Search for tutors (by subject, availability, reviews)*
- *Create tutor profile (subjects, schedule, fees)*
- *Create "Tutor Needed" request (subject, availability, preferences)*
- *Respond to tutoring requests*

5. Communication

- *In-app chat between users (buyer-seller, roommate-landlord, tutor-learner) without sharing personal contact details*

6. Reviews and Ratings

- *Leave review and rating for another user (transaction, tutoring, or housing interaction)*

7. Administration

- *View and manage all user profiles (suspend/ban accounts)*
- *Monitor posts and listings (review, remove inappropriate content)*
- *Manage user reports (fraud, inappropriate behavior)*
- *View system analytics (user activity, popular listings, engagement metrics)*

▼ 6. System Constraints :

1. User Verification Constraint

- *Only users with a valid university email address can register.*
- *All accounts must be verified via OTP before use.*

2. Privacy & Security Constraint

- *Direct sharing of personal contact details in public areas is prohibited.*
- *All chats must be encrypted and occur only through the in-app messaging system.*

3. Content Moderation Constraint

- *All posts and listings must comply with community guidelines.*
- *The system must allow admins to remove or block inappropriate content within 24 hours of a report.*

4. Platform Accessibility Constraint

- *The system must be accessible via standard web browsers and mobile devices.*
- *Compatibility with the latest two versions of major browsers is required.*

5. Data Retention & Backup Constraint

- *User data must be stored securely in compliance with local data protection laws.*

- ***Backups must be performed at least once every 24 hours.***

6. Operational Constraint

- ***The system must support a minimum of 10,000 concurrent users without performance degradation.***
- ***Search results should be returned within 2 seconds under normal load.***

7. Geographical Constraint

- ***Services are restricted to students and administrators within participating universities' domains.***

▼ 3. Specific Requirements:

▼ 3.1 Functional Requirements

▼ 3.1.1 Student (Marketplace User) Requirements

1.0	User Home Page – All Features Availability
1.1	Registration
1.1.1	Taking full name
1.1.2	Taking university email address
1.1.3	Taking username
1.1.4	Taking password
1.1.5	Taking confirm password
1.1.6	Submitting registration form
1.1.7	Sending OTP to university email for verification
1.2	Login
1.2.1	Taking username
1.2.2	Taking password

1.0	User Home Page – All Features Availability
1.2.3	Providing “forgot password” option
1.2.3.1	Submitting university email to receive OTP for password reset
1.2.4	Submission of login
1.3	Profile Management
1.3.1	View personal profile information
1.3.2	Edit and update profile details
1.4	Item Marketplace
1.4.1	Search for items by keywords
1.4.2	Search for items by categories
1.4.3	Search for items by price range
1.4.4	Create a post to sell an item (upload images, provide description, set price)
1.5	Housing
1.5.1	Browse housing listings (filter by rent, location, number of roommates)
1.5.2	Post a housing listing (add rent, location, contact details)
1.6	Tutor Services
1.6.1	Search for tutors (subject, availability, reviews)
1.6.2	Create a tutor profile (subjects, schedule, fees)
1.7	Communication
1.7.1	In-app chat with other users (buyers, sellers, tutors) without sharing personal contact information
1.8	Ratings and Reviews
1.8.1	Leave a review and rating for another user (after transaction or tutoring session)

▼ 3.1.2 Student – Room Seeker/Provider Requirements

2.0	Housing-Specific Features
2.1	Login
2.1.1	Taking username

2.0	Housing-Specific Features
2.1.2	Taking password
2.1.3	Forgot password with OTP sent to university email
2.2	Browse Housing Listings
2.2.1	Filter by rent
2.2.2	Filter by location
2.2.3	Filter by number of roommates
2.3	Post Housing Listing
2.3.1	Add rent, location, and contact details
2.4	Communication
2.4.1	In-app chat with potential roommates or landlords
2.5	Ratings and Reviews
2.5.1	Leave a review and rating for another user

▼ 3.1.3 Student – Tutor Requirements

3.0	Tutor-Specific Features
3.1	Login
3.1.1	Taking username
3.1.2	Taking password
3.1.3	Forgot password via OTP to university email
3.2	Tutor Profile
3.2.1	Specify subjects to teach
3.2.2	Specify availability schedule
3.2.3	Set expected fees
3.3	Respond to Requests
3.3.1	View "Tutor Needed" requests
3.3.2	Contact student via in-app chat
3.4	Communication
3.4.1	In-app chat with learners
3.5	Ratings and Reviews

3.0	Tutor-Specific Features
3.5.1	Leave a review and rating for a learner

▼ 3.1.4 Student – Learner Requirements

4.0	Learner-Specific Features
4.1	Login
4.1.1	Taking username
4.1.2	Taking password
4.1.3	Forgot password via OTP to university email
4.2	Tutor Search
4.2.1	Search tutors by subject
4.2.2	Search tutors by availability
4.2.3	Search tutors by reviews
4.3	Tutor Request
4.3.1	Create "Tutor Needed" request (subject, availability, preferences)
4.4	Communication
4.4.1	In-app chat with tutors
4.5	Ratings and Reviews
4.5.1	Leave a review and rating for a tutor

▼ 3.1.5 System Administrator Requirements

5.0	Administration Features
5.1	User Management
5.1.1	View all user profiles
5.1.2	Suspend or ban users violating community guidelines
5.2	Post and Listing Monitoring
5.2.1	Review and remove inappropriate posts
5.3	Report Management
5.3.1	View reports of fraud or inappropriate behavior
5.3.2	Investigate and take action

5.0	Administration Features
5.4	Analytics
5.4.1	View data on user activity
5.4.2	View popular listings
5.4.3	View engagement metrics

Link: https://www.notion.so/GROUP-NAME-UNIFY-24fc342cf1c9809e8d8cf60906312f8a?source=copy_link