Career Route - SRS

1st Phase

Abstract

Phase 1 document defines the core MVP features, including user and mentor registration, verification, secure login, mentor discovery, session booking, video meetings, payments, and essential admin controls. The goal of this phase is to establish the platform's fundamental workflows and ensure a stable foundation for future enhancements.

Contents

Business Rules

ID	Business Rule	Description
BR-01	Only verified mentors can accept or conduct sessions.	Ensures the authenticity and quality of mentors.
BR-02	A mentee must have a complete profile before requesting sessions.	AI matching requires data such as goals and interests.
BR-03	A mentee can request a maximum of 3 active sessions per week.	Prevents system abuse and ensures fair mentor access.
BR-04	Mentors must define their availability schedule before being matched.	Keeps AI matching accurate and prevents scheduling conflicts.
BR-05	The AI engine must recommend at least 3 mentors with a compatibility score $\geq$ 70%.	Guarantees quality matching and user choice.
BR-06	Mentors can reject or reschedule session requests within 24 hours.	Improves scheduling flexibility.
BR-07	A session cannot be canceled within 2 hours of its start time.	Avoids last-minute disruptions.
BR-08	Both mentor and mentee must confirm session completion for feedback to be enabled.	Ensures valid feedback data.
BR-09	Feedback must be submitted within 48 hours of session completion.	Keeps analytics accurate and timely.
BR-10	Ratings must be between 1 and 5 stars.	Maintains uniform scoring scale.
BR-11	Users must verify their email before accessing the platform.	Prevents fake or duplicate accounts.
BR-12	Admins can deactivate accounts inactive for over 90 days.	Maintains platform hygiene.
BR-13	Notification must be sent on major events: session acceptance, cancellation, or new recommendation.	Keeps users informed in real-time.
BR-14	AI algorithm retrains every 30 days based on feedback data.	Ensure recommendations stay up to date.
BR-15	Admin can generate monthly reports for system usage and satisfaction scores.	Supports performance tracking and decisions.

BR-16	Users cannot message others unless they have an approved session connection.	Prevents spam and privacy breaches.
BR-17	All passwords must be stored using encryption.	Ensures security and data protection compliance.
BR-18	Admin actions (create, update, delete user/session) must be logged.	Maintains auditability.
BR-19	Mentors with an average rating below 3.0 may be flagged for review.	Maintains platform quality.
BR-20	Session history and feedback must be retained for at least 12 months.	Supports analytics and compliance.

Features & Use Cases

Admin Features

<table>
<tr><th>Feature Code</th><th>A01</th></tr>
<tr><td>Name</td><td>Admin Mentor Review & Approval</td></tr>
<tr><td>Description</td><td>This feature allows the Admin to review mentor applications, verify their account, and approve or reject their accounts. Once approved, mentors gain access to their profiles and can begin offering mentorship sessions. Rejected mentors are notified and can reapply again.</td></tr>
<tr><td>Preconditions</td><td>- Admin is logged into the system with the appropriate permissions.
- Mentors have completed their registration and complete there profile (certifications, experience proof, etc.).
- The system has received the mentor application for review.</td></tr>
<tr><td>Main Flow</td><td>1. Admin Logs in
The Admin logs into the platform with administrative credentials.
Admin navigates to the “Mentor Review” section from the admin dashboard.
2. Admin Views Mentor Applications
The System displays a list of pending mentor applications.
Each mentor application includes the following information:
Name, expertise, and bio
Submission status
Application date
3. Admin Reviews Mentor Profile
The Admin selects a mentor application from the list.
The Admin reviews the mentor’s credentials, ensuring they are valid and complete.
4. Admin Approves or Rejects the Mentor
After reviewing the profile:
If the mentor’s credentials are valid and meet platform standards, the Admin clicks “Approve”.
If there are issues with the documents or credentials, the Admin clicks “Reject” and provides feedback for re-submission.
5. System Updates Mentor Status</td></tr>
</table>

	- If the **mentor is approved**, the **System**: - Changes the mentor status to **“Approved”**. - Sends an approval email to the mentor: **“Your mentor profile has been approved. You can now complete your profile and start booking sessions.”** - Grants the mentor access to their dashboard to complete their profile. - If the **mentor is rejected**, the **System**: - Sends a rejection email to the mentor: **“Your mentor profile has been rejected. You can reapply again.”** - The mentor is marked as **“Rejected”** in the system, and the application is archived.
Alternate Flows	**A1 – Missing Data (Step 3)** - If the **mentor’s uploaded a data which** are incomplete (e.g., missing certifications or ID), the system shows: **“Missing Data required . Please fill it.”** - Admin cannot approve the mentor until all required data are provided. **A2 – Document Verification Failed (Step 4)** - If the **documents do not pass verification** (e.g., fake documents or mismatched details), the system shows: **“Document verification failed. Please upload valid documents.”** - Admin rejects the mentor and requests new documents. **A4 – Mentor Status Already Approved (Step 4)** - If the **mentor was previously approved** but has pending changes or new uploads, the system shows: **“This mentor is already approved. Any new updates or document changes will be reviewed accordingly.”** - Admin is prompted to review the updated documents but does not need to approve the mentor again unless required. **A5 – Mentor Status Already Rejected (Step 4)** - If the **mentor was previously rejected**, the system shows: **“This mentor application was rejected previously.”** - Admin reviews the updated documents and decides whether to approve or reject again.
Postconditions	If the **mentor is approved**, the following occur:

	• The mentor status is updated to **"Approved"** in the system. • The mentor can proceed to complete their profile and start accepting mentee bookings. • The mentor receives an **approval email**. If the **mentor is rejected**, the following occur: • The mentor status is updated to **"Rejected"** in the system. • The mentor can be notified to reapply. • The mentor receives a **rejection email** with instructions on what to correct.

Feature Code	**A02**
Name	Admin Send Notifications
Description	This feature allows the Admin to send notifications to users (mentors and mentees) regarding account updates, session bookings, reminders, policy changes, and other system alerts. Notifications are sent via email, in-app notifications, and push notifications (if applicable). These notifications keep users informed and engaged.
Preconditions	- Admin is logged into the system with appropriate permissions. - Users (mentors, mentees) must have valid and active accounts. - The system must have user contact information (email addresses, phone numbers, etc.). - Notification content is prepared and ready to be sent (message, target users, etc.).

Main Flow	**1. Admin Logs in**
	• Admin logs into the system and accesses the **Admin Dashboard**.
	2. Admin Navigates to Notifications Panel
	• From the Admin Dashboard, Admin navigates to the **Notifications Panel**.
	• Admin selects **"Send Notifications"** option.
	3. Admin Composes Notification
	• Admin selects the type of notification to be sent (e.g., **Account Update**, **Session Reminder**, **Policy Change**, **General Announcement**).
	• Admin enters the notification content.
	  ○ **For email notifications**: The system provides an email editor to write the message.
	  ○ **For in-app notifications**: Admin types a short message to be shown within the app.
	4. Admin Selects Recipients
	• Admin selects the target audience for the notification. This can be:
	  ○ All users
	  ○ All mentors
	  ○ All mentees
	  ○ Specific users (based on user filters such as role, status, or activity)

	◦ Custom user list (via uploaded CSV or manual selection) **5. Admin Sends Notification** • Admin reviews the notification and recipients list. • Admin clicks **“Send”**. • The system sends the notification to the selected users via the chosen channels (email, in-app, push). **6. Confirmation** • The system displays a confirmation message: **“Notification successfully sent to [X] users.”**
Alternate Flows	**A1 – Missing User Data (Step 4)** • If the system cannot find the required user contact data (e.g., missing email addresses or phone numbers), it displays: **“Unable to send notification: Missing contact information for selected users.”** • Admin is asked to resolve the data issue and try again. **A2 – Invalid Email Format (Step 3)** • If an invalid email format is detected, the system displays: **“Invalid email format. Please enter a valid email address.”** • Admin must correct the email format and retry. **A3 – No Recipients Selected (Step 4)** • If Admin does not select any recipients, the system displays: **“No recipients selected. Please choose users to send notifications.”** • Admin is prompted to select at least one recipient group before proceeding. **A4 – System Error (Step 5)** • If a technical issue occurs during the sending process (e.g., server error, email service down), the system displays: **“Error sending notifications. Please try again later.”** • Admin is asked to retry after the issue is resolved. **A5 – Email/Push Failure (Step 5)** • If email or push notification fails to deliver to any user, the system shows: **“Some notifications could not be delivered. Please check user details or retry later.”** • The system logs the failed notifications for admin review.
Postconditions	• The selected users receive the notification via email, in-app, or both (depending on their preferences). • The system logs the notification delivery and stores it for audit purposes. • Admin has visibility over the sent notifications and can review their delivery status in the admin dashboard. • If the notification includes any links (such as a session reminder), those links are properly functional, and users can navigate to relevant pages (e.g., session details, profile updates).

Mentor Features

Feature Code	FEAT3
Name	Mentor Registration
Description	This feature allows the Admin to send notifications to users (mentors and mentees) regarding account updates, session bookings, reminders, policy changes, and other system alerts. Notifications are sent via email, in-app notifications, and push notifications (if applicable). These notifications keep users informed and engaged.
Preconditions	- Admin is logged into the system with appropriate permissions. - Users must have valid and active accounts. - The system must have user contact information (email addresses, phone numbers, etc.). - Notification content is prepared and ready to be sent (message, target users, etc.).
Main Flow	**1 Access Registration** 1. Mentor navigates to the platform homepage. 2. Mentor clicks "Sign Up". 3. System displays registration form. **2. Fill Registration Form** 4. Mentor enters required registration fields: o Full Name o Email Address o Password o Confirm Password 5. Mentor selects Role = Mentor. 6. Mentor accepts Terms & Conditions and Privacy Policy. 7. Mentor clicks Create Account. **3. System Validation** 8. System validates: o Email format o Password strength (min 8 characters, includes letters & numbers) o Password and confirmation match o Email not already registered 9. If validation passes, system creates mentor account. **4. Email Verification** 10. System sends a verification email with secure link. 11. Mentor logs in to their email and clicks the verification link.

	12. System verifies mentor email and marks it as verified. **5. Registration Completion** 13. System sets mentor account status = Pending Admin Approval. 14. System redirects mentor to: "Upload Documents for Verification" 15. Mentor sees instructions to upload: • National ID / Passport • CV • Certificates (optional) **16.** Mentor can proceed only after document upload (covered in next feature).
Alternate Flows	**A1 – Missing User Data (Step 4)** • If the system cannot find the required user contact data (e.g., missing email addresses or phone numbers), it displays: **"Unable to send notification: Missing contact information for selected users."** • Admin is asked to resolve the data issue and try again. **A2 – Invalid Email Format (Step 3)** • If an invalid email format is detected, the system displays: **"Invalid email format. Please enter a valid email address."** • Admin must correct the email format and retry. **A3 – No Recipients Selected (Step 4)** • If Admin does not select any recipients, the system displays: **"No recipients selected. Please choose users to send notifications."** • Admin is prompted to select at least one recipient group before proceeding. **A4 – System Error (Step 5)** • If a technical issue occurs during the sending process (e.g., server error, email service down), the system displays: **"Error sending notifications. Please try again later."** • Admin is asked to retry after the issue is resolved. **A5 – Email/Push Failure (Step 5)** • If email or push notification fails to deliver to any user, the system shows: **"Some notifications could not be delivered. Please check user details or retry later."** • The system logs the failed notifications for admin review.
Postconditions	• The selected users receive the notification via email, in-app, or both (depending on their preferences). • The system logs the notification delivery and stores it for audit purposes.

	• Admin has visibility over the sent notifications and can review their delivery status in the admin dashboard. • If the notification includes any links (such as a session reminder), those links are properly functional, and users can navigate to relevant pages (e.g., session details, profile updates).

Feature Code	FEAT4
Name	Mentor Email Verification
Description	This feature ensures that every mentor verifies their email address before gaining access to the platform's core functionalities, including document upload, profile setup, and availability scheduling. When a mentor registers, the system sends a verification email containing a secure token-based link. The mentor must open the email and click the verification link to activate their account. This step ensures identity confirmation, system security, and prevents fake or fraudulent accounts. Until the email is verified, the mentor is restricted from accessing mentor-specific pages.
Preconditions	• Mentor has completed the initial registration form. • Mentor's email is valid and reachable. • System is able to send verification emails (email service active). • Mentor has not previously verified their email. • Mentor is not yet approved by Admin.

Main Flow	**1 Registration Completed**
	1. Mentor completes registration by submitting name, email, and password.
	2. System creates mentor account with status: **Email Not Verified**.
	3. System sends automated verification email containing:
	  o Verification link (secure token)
	  o Instructions
	  o Expiry time (e.g., 24 hours)
	4.2 Mentor Opens Verification Email
	4. Mentor opens email inbox.
	5. Mentor clicks the verification link.
	4.3 System Validates Token
	6. System receives the request and validates:
	  o Token authenticity
	  o Token expiration
	  o Token-user match
	7. If valid:
	System updates mentor record to **Email Verified**.

	4.4 Email Verification Success 8. System redirects mentor to a success page: **“Your email has been successfully verified.”** 9. Mentor can now access: o Document Upload o Profile Management o Availability Setup
Alternate Flows	**A1 — Mentor Never Received Email (Step 2–4)** Mentor clicks “Resend Verification Email”. System sends a new email and displays: “A new verification email has been sent.” **A2 — Token Expired (Step 6)** System displays: “Verification link expired. Please request a new one.” Mentor clicks Resend, and system issues a fresh token. **A3 — Token Invalid or Tampered (Step 6)** System displays: “Invalid verification link.” **A4 — Email Already Verified (Step 6–8)** If mentor clicks the link again, system shows: “This email has already been verified.” **A5 — Email Service Down at Registration (Step 3)** System displays alert: “Verification email could not be sent. Please try again later.” Mentor is not blocked but cannot verify until email service is restored. **A6 — Mentor Attempts to Access Dashboard Without Verifying (Any time before step 8)** System blocks access and shows: “Please verify your email to continue.” With a button: Resend Verification Email
Postconditions	**If successful:** • Mentor’s email is marked as *Verified*. • Mentor gains access to next steps (document upload and profile setup). • A confirmation message appears. • Verification timestamp is stored in the system. **If unsuccessful:** • Email remains unverified. • Mentor cannot proceed to onboarding steps.

Feature Code	FEAT5
Name	Mentor Secure Login
Description	This feature allows mentors to securely log in to the platform using their registered email and password. The system authenticates credentials, checks mentor onboarding status, and grants or restricts access based on verification and approval stages. The login process includes: • Email & password validation • Account status checks (Email Verified / Pending Approval / Approved / Rejected / Blocked) • Secure token issuance (JWT) • Multi-device login rules • Login attempt monitoring and security notifications This ensures only valid, verified, and approved mentors can access their dashboard.
Preconditions	• Mentor has a registered account. • Mentor has verified their email. • Mentor's account is not blocked. • Internet connection is available. • System authentication service is operational.
Main Flow	**1 Access Login Page** 1. Mentor navigates to the platform's Login page. 2. System displays email and password fields. **4.2 Submit Login Credentials** 3. Mentor enters email and password. 4. Mentor clicks **"Login"**. 5. System checks if email exists. 6. System validates password. **4.3 Account Status Validation** 7. System checks mentor account status: ○ **Email Not Verified** ○ **Pending Admin Approval** ○ **Approved** ○ **Rejected** ○ **Blocked** 8. If **Email Verified + Approved**, system proceeds. **4.4 Successful Login** 9. System generates authentication token (JWT). 10. System redirects mentor to:

	◦ **Pending Approval Page**, if status = Pending ◦ **Dashboard**, if status = Approved 11. System logs the login event.
Alternate Flows	**A1 — Incorrect Email or Password (Step 5–6)** System displays: "Invalid email or password." **A2 — Email Not Verified (Step 7)** System displays: "Please verify your email to continue." Button: Resend Verification Email **A3 — Account Pending Approval (Step 7–10)** System redirects to: "Your documents are under review. You will be notified upon approval." **A4 — Mentor Rejected (Step 7)** System displays: "Your mentor application was rejected. Please contact support." **A5 — Mentor Account Blocked (Step 7)** System displays: "Your account is blocked. Contact support for assistance." Login is denied. **A6 — Too Many Login Attempts (Step 3–6)** After 5 failed attempts: System displays: "Too many failed attempts. Please try again in 10 minutes." And sends mentor an email: "Suspicious login attempts detected." **A7 — Authentication Service Down (Step 9)** System displays: "Login service is temporarily unavailable. Please try again later."
Postconditions	**If successful:** • Mentor is authenticated and redirected to the appropriate dashboard. • System generates a secure login token (JWT). • Login event is recorded in audit logs. • Mentor can access features based on account status. **If unsuccessful:** • Mentor remains on the login page. • No access is granted.

	• System displays relevant error messages.

Feature Code	FEAT6
Name	Mentor Profile Management
Description	This feature allows mentors to create, edit, and maintain their professional profiles on the platform. A complete mentor profile helps mentees evaluate the mentor's expertise, background, pricing, and availability before booking a session. The mentor profile includes the following components: • Personal information (name, headline, profile photo) • Professional bio • Expertise & specialization categories • Years of experience • Pricing (30-min & 60-min rates) • Languages spoken • LinkedIn profile URL • Certifications & qualifications (uploaded or linked) • Portfolio links (optional) Mentors can update their profile anytime, but some data (pricing, expertise, certifications) may require re-approval by Admin.
Preconditions	• Mentor is logged in. • Mentor has verified their email. • Mentor's documents have been submitted (may still be under review). • Mentor account is not blocked or rejected. • System is online & profile module is available.

Main Flow	**1 Access Profile Page**
	1. Mentor logs in successfully.
	2. Mentor navigates to **Dashboard → Profile Management**.
	3. System loads mentor's current profile data.
	2. Updating Profile Information
	4. Mentor edits personal fields such as name, headline, and photo.
	5. Mentor updates professional fields:
	    o Bio
	    o Expertise categories
	    o Experience years
	    o Session pricing
	    o Languages spoken
	6. Mentor adds or updates links:

	○ LinkedIn URL ○ Portfolio/website 7. Mentor uploads or removes certifications (PDF/JPG). **3. System Validation** 8. System validates: ○ Required fields (bio, expertise, experience, pricing) ○ Correct pricing format (numeric) ○ Valid LinkedIn URL format ○ Supported files for certifications ○ Profile picture standards **4. Save Changes** 9. Mentor clicks **"Save Changes"**. 10. System saves all valid fields. 11. System checks if any updated fields require Admin approval: ○ Expertise ○ Certifications ○ Pricing 12. If yes, system marks profile as: **"Partially Under Review – Some fields pending approval."** 13. System confirms with success message: **"Profile updated successfully."**
Alternate Flows	**A1 — Missing Required Fields (Step 8)** If mandatory fields are missing: System displays: "Please complete all required fields before saving." **A2 — Invalid Pricing Format (Step 8)** If mentor enters non-numeric values: System displays: "Session pricing must be a numeric value." **A3 — Invalid LinkedIn URL (Step 8)** If URL doesn't match LinkedIn pattern: System displays: "Please enter a valid LinkedIn profile URL." **A5 — Admin Approval Required (Step 11–12)** If sensitive fields are changed: System displays banner:

	"Your profile updates are pending Admin approval. Your profile remains visible, but new changes are not yet published." **A6 — Save Operation Fails (Step 9–11)** If database error or connection lost: System displays: "An error occurred while saving your profile. Please try again." **A7 — Mentor Account Blocked (Step 1–3)** If mentor is blocked during edit attempt: System logs them out and shows: "Your account is restricted. Please contact support."
Postconditions	**If successful:** • Mentor profile information is saved and updated. • Changes requiring Admin approval are flagged for review. • Mentees can discover the updated profile in search results. **If unsuccessful:** • No changes are saved. • System shows validation or error messages

Feature Code	FEAT7
Name	Mentor Availability Schedule Management
Description	This feature allows mentors to define their weekly availability for sessions. Mentors can add available time slots, edit them, or block specific times to prevent bookings. The system uses these availability slots to display real-time booking options to mentees. Key functions include: • Create available time slots • Edit or delete time slots • Block unavailable periods • Recurring weekly schedule setup • Time zone support • Prevent overlapping slots • Prevent editing slots already booked by mentees • Automatic visibility in mentee booking calendar
Preconditions	• Mentor is logged in. • Mentor's email is verified. • Mentor has completed at least basic profile setup. • Mentor is approved by Admin or at least allowed to configure availability.

	• System scheduling module is online. • Time zone is set for the mentor.
Main Flow	**1. Access Availability Page** 1. Mentor logs in. 2. Mentor navigates to **Dashboard → Availability Schedule**. 3. System loads the weekly calendar view showing existing time slots. **2. Add New Availability Slot** 4. Mentor clicks **“Add Slot”**. 5. System displays a form with: o Date o Start Time o End Time o Recurrence option (One time / Weekly repeated) 6. Mentor selects date & time range. 7. Mentor optionally enables **Weekly Recurrence**. 8. Mentor clicks **Save**. **3. System Validation** 9. System validates slot: o Start time < End time o No overlapping slots o Slot is in the future o Slot does not conflict with a booked session 10. If valid, system adds slot to mentor’s schedule. **4. Edit an Existing Slot** 11. Mentor selects an existing slot. 12. Mentor clicks **Edit**. 13. Mentor updates time or changes recurrence. 14. System validates changes. 15. Updated slot is saved. **5. Block or Delete a Slot** 16. Mentor selects a slot to remove. 17. Mentor clicks **Delete**. 18. System checks if slot is booked. 19. If not booked, system deletes it successfully. **6. Sync with Booking Calendar** 20. System updates the mentee booking calendar. 21. Mentees can now see available slots in real time.

Alternate Flows	**A1 — Overlapping Slots (Step 9)** If slot overlaps with existing slot: System displays: "This time overlaps with another availability slot." **A2 — Slot in the Past (Step 9)** System shows: "You cannot add availability in the past." **A3 — Editing a Booked Slot (Step 14–19)** If mentor tries to edit: System displays: "This slot cannot be modified because it is already booked." To delete: "This slot cannot be deleted because it contains an active booking." **A4 — Invalid Time Format (Step 9)** System displays: **"**Invalid time range. Start time must be before end time." **A5 — System Error (Step 10–15)** System displays: "Could not save availability. Please try again later." **A6 — Recurrence Conflict (Step 9)** If recurring weekly schedule conflicts with blocked times: System displays: "Recurring slot conflicts with unavailable times."
Postconditions	**If successful:** • Availability slots are created, updated, or deleted. • Schedule is synced with mentee booking calendar. • Booked slots are locked to prevent modification. **If unsuccessful:** • No changes are saved. • System displays error validation messages.

Feature Code	**FEAT8**
Name	Mentor Session Management
Description	This feature allows mentors to manage all their mentorship sessions, including viewing upcoming sessions, accepting or declining session requests (if enabled), starting sessions, accessing meeting links, reviewing completed sessions, and viewing session details such as mentee name, session duration, booking time, and payment status.

<table>
<tr><td></td><td>Core actions include:
View dashboard of upcoming and past sessions
Accept or decline session requests (if approval is required)
Start session via integrated meeting link (Zoom SDK)
View mentee details
Mark session updates (e.g., mentee didn’t show)
View AI session summary
Access chat window (3-day chat)
Review session recording (view-only; cannot download or share)
Mentors must be able to easily track and manage their scheduled interactions to ensure a smooth mentorship experience.</td></tr>
<tr><td>Preconditions</td><td>Mentor is logged in.
Mentor email is verified.
Mentor is approved by Admin.
Mentor has defined at least one availability slot (optional depending on booking model).
System session module is online.
A mentee has booked at least one session.</td></tr>
<tr><td>Main Flow</td><td>1. Access Session Management<ol start="1">
Mentor logs in.
Mentor navigates to Dashboard → Sessions.
System loads two tabs:
Upcoming Sessions
Past Sessions
2. View Session Details<ol start="4">
Mentor selects a session.
System displays details including:
Mentee name & profile
Session date & time
Duration (30 or 60 minutes)
Meeting link (Zoom)
Payment status
Booking timestamp
AI summary (if completed)
Session notes
3. Accept or Decline Session (If approval required)<ol start="6">
If platform rules require mentor approval:
Mentor clicks Accept or Decline.</td></tr>
</table>

	7. System updates session status:
	  o Accepted → mentee notified
	  o Declined → mentee refunded automatically
	8. If accepted, session appears in **Upcoming Sessions**.
	4. Start Session
	9. When session time arrives, mentor clicks **“Join Session”**.
	10. System launches meeting using integrated Zoom SDK.
	11. System marks session as **In Progress**.
	5. Complete Session
	12. After meeting ends, system automatically sets session as **Completed**.
	13. AI generates session summary and key discussion points.
	14. Mentor can view the AI summary under **Completed Sessions**.
	6. Post-Session Interactions
	15. Mentor gains access to 3-day chat window for follow-up communication.
	16. Mentor may view session recording (view-only, no download).

Alternate Flows	**A1 — Mentor Declines Session (Step 6–7)** System displays: “You have declined the session. The mentee will be notified and refunded.” **A2 — Mentee Cancels Session Before Start** If mentee cancels within allowed timeframe: System removes session from mentor’s upcoming list. **A3 — Session Overlaps with Another Meeting (Step 9)** System displays: “You have another session at this time. Please resolve scheduling conflict.” Booking does not change automatically. **A4 — Meeting Link Not Available (Step 9–10)** If Zoom SDK fails: System displays: “Unable to start meeting. Please try again or contact support.” **A5 — Mentor No-Show** If mentor does not join within X minutes: System logs: “Mentor did not attend the session.” Admin may apply penalties depending on policy. **A6 — System Fails to Update Status (Step 12)** If auto-completion fails: System displays:

	“Session status update failed. Please refresh.” Admin may manually update. **A7 — AI Summary Not Generated (Step 13)** System displays placeholder: “AI summary is being generated. Please check again shortly.” **A8 — Chat Window Already Expired (Step 15)** System displays: “Chat window is closed. Communication is no longer available.” **A9 — Mentor Tries to Edit Availability After Booking (Indirect)** System displays: “This slot is locked due to an active booking.”
Postconditions	**If successful:** • Mentor views and manages sessions. • Sessions update according to mentor’s actions (Accepted, Declined, Completed). • Mentor can join session via meeting link. • AI session summaries become accessible after session end. • System updates session status in all related views (mentee, admin). **If unsuccessful:** • No session changes occur. • Mentor receives error messages.

Mentee Features

Feature Code	FEAT9
Name	Mentee Registration & Verification
Description	This feature allows new mentees (students, graduates, early-career professionals) to create an account on the platform and verify their email address before accessing mentorship features. The registration process includes: • Creating a user account using name, email, and password • Selecting the role “Mentee” • Email verification via a secure token link • Completing initial profile data (career interests, goals) Mentees cannot book sessions, access profiles, or use the platform’s services until their email is successfully verified.
Preconditions	• Mentee is not already registered. • System registration & email services are operational. • User has a valid email address.

	• Internet is available.
Main Flow	**1. Start Registration** 1. Visitor opens the website. 2. Visitor clicks **“Sign Up”**. 3. System displays the registration form. **2. Enter Registration Details** 4. Mentee enters: o Full Name (required) o Email (required, must be unique) o Password (required, must meet complexity rules) o Confirm Password o Selects Role: **Mentee** 5. Mentee clicks **“Create Account”**. **3. System Validation** 6. System validates: o Email format o Email uniqueness o Password requirements o Required fields 7. If valid, system creates the account with status **Email Not Verified**. **4. Email Verification** 8. System sends a verification email containing a unique token link. 9. Mentee opens their inbox and clicks the verification link. 10. System checks the token’s validity and expiration. **5. Account Activation** 11. If token is valid, system marks email as **Verified**. 12. System redirects mentee to a success page: **“Your email has been verified successfully.”** 13. Mentee can now log in. **6. First Login After Verification** 14. Mentee logs in for the first time. 15. System guides mentee to complete initial profile setup (career interests, goals).
Alternate Flows	**A1 — Missing Required Fields (Step 4–6)** System displays: “Please fill all required fields.” **A2 — Invalid Email Format (Step 6)**

	System displays: “Please enter a valid email address.” **A3 — Email Already Exists (Step 6)** System displays: “This email is already registered. Please log in or reset your password.” **A4 — Password Mismatch (Step 6)** System displays: “Passwords do not match.” **A5 — Weak Password (Step 6)** System displays: “Password must be at least 8 characters and include letters and numbers.” **A6 — Email Not Received (After Step 8)** User clicks Resend Verification Email. System sends a new token and displays: “Verification email resent.” **A7 — Token Expired (Step 10)** System displays: “Your verification link has expired. Please request a new one.” **A8 — Invalid or Tampered Token (Step 10)** System displays: “Invalid verification link.” **A9 — Attempting Login Before Verification (Step 14)** System displays: “Please verify your email to continue.” With a Resend Link button. **A10 — Email Service Failure (Step 8)** System shows: “Verification email could not be sent. Please try again later.” Accounts remain inactive.
Postconditions	**If successful:** • A new mentee account is created. • Verification email is sent. • After clicking the verification link, the account becomes **Active**. • Mentee can log in and continue completing their profile. **If unsuccessful:** • No account is created or activated. • System provides relevant error messages

Feature Code	FEAT10
Name	Mentee Login
Description	This feature allows registered mentees to securely log in to the platform using their email and password. The system authenticates the mentee's credentials, verifies account status, and grants access to the mentee dashboard. The login process includes: • Email & password validation • Email verification check • Account status check • Secure JWT token generation • Login attempt monitoring and error handling Only mentees with verified email addresses and active accounts can access the system.
Preconditions	• Mentee has a registered account. • Mentee's email is verified. • Account is **active** (not blocked or deactivated). • Internet connection is available. • System authentication service is operational.
Main Flow	**1. Access Login Page** 1. Mentee opens the website. 2. Mentee clicks **"Login"**. 3. System displays the login form. **2. Enter Credentials** 4. Mentee enters registered email. 5. Mentee enters password. 6. Mentee clicks **"Login"**. **3. System Validation** 7. System checks if the email exists. 8. System validates the password. **4. Account Status Checks** 9. System checks mentee's account status: ○ Email Verified ○ Active ○ Not Blocked ○ Not Deactivated 10. If all checks pass, system continues. **5. Successful Login**

	11. System generates authentication token (JWT). 12. System redirects mentee to their **Dashboard**. 13. System logs the login event.
Alternate Flows	**A1 — Invalid Email or Password (Step 7–8)** System displays: “Invalid email or password. Please try again.” **A2 — Email Not Verified (Step 9)** System displays: “Please verify your email to continue.” Button: Resend Verification Email **A3 — Account Blocked (Step 9)** System displays: “Your account is temporarily blocked. Contact support for assistance.” **A4 — Attempt to Log in with Unregistered Email (Step 7)** System displays: “No account found with this email.” **A5 — Too Many Login Attempts (Security Lock)** After 5 failed attempts: System displays: “Too many failed login attempts. Try again in 10 minutes.” System sends security email to mentee: “Your account experienced multiple failed login attempts.” **A6 — System Timeout or Server Error (Step 11–12)** System displays: “Login service unavailable. Please try again later.” **A7 — Password Reset Needed (Forgot Password)** If mentee clicks “Forgot Password”: System sends password reset link via email.
Postconditions	**If successful:** • Mentee is authenticated and redirected to the dashboard. • System issues a secure authentication token (JWT). • Login attempt is stored in audit logs. **If unsuccessful:** • No access is granted. • Mentee remains on login page with relevant error message.

Feature Code	FEAT11
Name	Mentee Profile Creation
Description	After registration and email verification, mentees must complete their profile to personalize their mentorship experience. A complete mentee profile helps the system recommend suitable mentors and ensures mentors understand the mentee's goals before the session. The mentee profile includes: • Basic Information (name, profile picture) • Career Interests • Education Level / Field • Career Goals / Objectives • Preferred Languages • Short Bio or Introduction • Optional: Uploaded documents (CV, transcript) • Optional: LinkedIn URL The system guides the mentee through a simple onboarding flow until the profile is sufficiently complete (e.g., 80% completion).
Preconditions	• Mentee is logged in. • Mentee email is verified. • Mentee account is active (not blocked). • System profile module is available.
Main Flow	**1. Access Profile Setup** 1. Mentee logs in for the first time after verification. 2. System displays onboarding message: **"Complete your profile to get personalized mentor recommendations."** 3. Mentee clicks **"Start Profile Setup"**. **2. Fill Basic Information** 4. Mentee uploads a profile picture (optional but recommended). 5. Mentee confirms or edits their full name. **3. Add Career Information** 6. Mentee selects one or more **Career Interests** (e.g., Software Development, HR, Marketing). 7. Mentee selects **Education Level** (Student / Graduate / Professional). 8. Mentee enters **Career Goals** or areas they want help with. 9. Mentee writes a short **Bio** (e.g., "I want to transition into a data career"). 10. Mentee selects preferred communication **Languages**. **4. Add Optional Enhancements** 11. Mentee optionally uploads CV or other documents.

	12. Mentee optionally adds LinkedIn URL. **5. Save Profile** 13. Mentee clicks **"Save Profile"**. 14. System validates all required fields. 15. System saves profile information. 16. System redirects mentee to the **Dashboard** and displays: **"Your profile is complete!"**
Alternate Flows	**A1 — Missing Required Fields (Step 14)** System displays: "Please complete all required fields before saving." **A2 — Invalid LinkedIn URL (Step 12)** System displays: "Please enter a valid LinkedIn profile URL." **A4 — File Too Large (Step 11)** System displays: "File exceeds maximum size of 10MB." **A5 — Save Operation Fails (Step 15–16)** System displays: "An error occurred while saving your profile. Please try again later." **A6 — Mentee Skips Optional Sections** Mentee clicks Skip for optional items. System allows progress as long as required fields are filled. **A7 — Attempting to Access Features Without Completing Profile** If mentee tries to book a mentor before completing profile: System shows blocking message: "Please complete your profile to continue."
Postconditions	**If successful:** • Mentee profile information is saved. • Profile completion percentage is updated. • Profile becomes visible to mentors during upcoming sessions. • System can use the profile to suggest mentors. **If unsuccessful:** • No information is saved. • System shows relevant validation errors.

Feature Code	FEAT13
Name	Mentee Search and Mentor Recommendations
Description	This feature allows mentees to discover mentors through two pathways: **1. Manual Search & Filtering** Mentees can browse mentors using: • Search bar (name, skills, keywords) • Filters (expertise, price, experience, ratings, availability, language) • Sorting options (relevance, highest rated, lowest price, newest) **2. Mentor Recommendations** The system recommend mentors based on: • Mentee's profile (career interests, goals, experience level) • Mentee preferences (languages, price range) • Mentor availability • Historical mentee interactions • Platform-wide popularity AI recommendations appear in a personalized section titled: **"Recommended Mentors for You"** The feature ensures mentees can quickly find suitable mentors without browsing manually.
Preconditions	• Mentee is logged in. • Mentee profile is 100% completed (or meets minimum required fields). • Mentor profiles exist and at least some mentors are approved. • Search service is operational.
Main Flow	**1. Access Search Page** 1. Mentee navigates to **Find Mentors** page from dashboard. 2. System displays: 　o Search bar 　o Filter panel **2. Recommendation Generation** 3. System collects mentee data: 　o Career interests 　o Goals 　o Language preferences 　o Session history (if any) 4. AI model generates a ranked list of suggested mentors. 5. System displays recommendations with badges (e.g., *Top Match*, *Highly Rated*). **3. Manual Search** 6. Mentee enters a keyword in the search bar OR leaves it empty to browse.

	7. Mentee clicks **Search**. 8. System fetches mentors matching the query. **4. Apply Filters** 9. Mentee applies filters such as: o Expertise category o Price range o Experience level o Language o Availability o Rating 10. System refreshes mentor list accordingly. **5. View Mentor Details** 11. Mentee clicks on a mentor card. 12. System shows mentor profile: • Bio • Expertise • Experience • Pricing • Reviews • Next available slots • Certifications **6. Next Steps** 13. Mentee can proceed to **Book Session**, **Save Mentor**, or return to search results.
Alternate Flows	**A1 — No Mentors Match Search (Step 7–10)** System displays: “No mentors match your search. Try adjusting filters.” AI section remains visible. **A3 — Invalid Filter Combination (Step 9–10)** If mentee selects conflicting filters (e.g., "Arabic only" & "English only"): System displays: “No results found due to conflicting filters. Please adjust your selection.” **A4 — Empty Search Query (Step 6)** System displays all approved mentors sorted by relevance or popularity. **A5 — Slow Network / Timeout (Step 7–10)** System displays loading indicator or: “Unable to load mentors. Please try again.” **A6 — Mentee Profile Incomplete (Before Step 3)**

	If mentee tries to access recommendations: System shows: "Complete your profile to receive personalized recommendations." Button: Complete Profile **A7 — Unapproved Mentor Profiles in System** System automatically filters out unapproved mentors.
Postconditions	**If successful:** • Mentee sees a list of mentors matching their search criteria. • Recommendation list is displayed and can be interacted with. • Mentee can click a mentor to view full profile and book a session. **If unsuccessful:** • No mentors are shown. • System provides meaningful fallback messaging.

Feature Code	**FEAT14**
Name	Mentee Booking Mentorship Sessions
Description	This feature allows mentees to browse detailed mentor profiles to evaluate whether a mentor matches their goals, interests, budget, and learning preferences. The mentor profile is fully public (once approved by Admin) and includes all essential information so mentees can make an informed booking decision. Each mentor profile displays: • Profile picture & professional headline • Biography / About the mentor • Expertise categories • Years of experience • Languages spoken • Session pricing (30-min & 60-min) • Ratings & reviews from past mentees • Mentor's availability calendar • Certifications & qualifications • LinkedIn URL • Portfolio links (optional)
Preconditions	• Mentee is logged in. • Mentor profiles exist and are **Admin-approved**. • System mentor profile service is online. • Mentee has completed the minimum required profile data (for booking).
Main Flow	1. Mentee selects a mentor from the recommended or browsed mentor list.

	2. Mentee chooses the type of session (1-on-1). 3. The system displays available time slots for the mentor. 4. Mentee selects a time slot and proceeds to the booking page. 5. System shows the session details (mentor, time, session type). 6. Mentee clicks “Book Session” to confirm.
Alternate Flows	**A1 — Mentor Profile Not Found (Step 2)** System displays: “This mentor is not available at the moment.” Redirects to Search page. **A2 — Mentor Not Approved Yet (Step 2)** System hides the profile and shows: “This mentor is still under review.” **A3 — Mentor Temporarily Unavailable (Step 6)** If mentor disabled availability: System displays: “This mentor is not accepting new bookings at the moment.” Booking button is disabled. **A4 — No Reviews Available (Step 4–5)** System displays placeholder text: “This mentor has not received any reviews yet.” **A5 — Pricing Hidden Due to Admin Action (Step 3)** If Admin blocks pricing for review: System shows: “Pricing is temporarily unavailable.” **A6 — Availability Calendar Fails to Load (Step 6)** System displays: “Unable to load availability. Please try again later.” **A7 — System Timeout or Server Error** System displays: “Something went wrong. Please refresh the page.”
Postconditions	**If successful:** • Mentee can fully view mentor profile details. • Mentee can proceed to book a session. • Mentee can add mentor to Favorites (if feature exists). **If unsuccessful:** • Mentor profile is not displayed. • System shows appropriate error messages.

Feature Code	FEAT15
Name	Mentee Payment and Receipt Generation

Description	This feature allows mentees to securely pay for mentorship sessions and receive an automated receipt/invoice. A session booking is **not confirmed** until payment is successfully completed.
	A timed condition applies:
	✓ **New Business Rule – Payment Window (15 Minutes)**
	After a mentee selects a session time slot, they have **15 minutes** to complete the payment.
	• If payment is completed → the session becomes **Confirmed**.
	• If NOT paid within 15 minutes →
	    ○ The tentative booking is **canceled automatically**,
	    ○ The mentor's slot becomes available again, and
	    ○ The mentee receives a "Payment Timeout – Session Canceled" notification.
	This ensures fairness, prevents slot hoarding, and keeps mentor calendars accurate.
	Payments are processed via:
	• **Stripe** (international: Visa, Mastercard, PayPal, Apple Pay)
	• **Paymob** (MENA: Meeza, InstaPay, Vodafone Cash, etc.)
	After a successful payment:
	• A **receipt/invoice** is generated and stored.
	• 15% **platform commission** is calculated.
	• Mentor payout is scheduled.

Preconditions	• Mentee is logged in. • Mentee selected a session slot. • System created a **Pending Payment** record and started the 15-minute timer. • Payment gateway is available (Stripe or Paymob). • Mentor is verified and their session slot is not already booked.

Main Flow	**1. Start Payment Window**
	1. Mentee selects a mentor's available session slot.
	2. System creates a Pending Payment session record.
	3. System starts a 15-minute countdown timer.
	4. System redirects mentee to the Payment Page.
	2. Payment Initiation
	5. System displays:
	    ○ Session date & time
	    ○ Mentor details
	    ○ Session price
	    ○ Accepted payment methods
	    ○ Countdown timer showing remaining minutes

	6. Mentee chooses payment method (Stripe or Paymob). 7. Mentee clicks "Proceed to Pay". **3. Payment Processing** 8. System redirects to the external secure payment gateway. 9. Mentee enters payment details. 10. Gateway processes payment. 11. Gateway sends callback/webhook to the platform with payment status. **4. Payment Success** 12. If payment is Successful before the 15-minute timer ends: o System updates payment status to Success o Session status becomes Confirmed o Timer is canceled 13. System calculates commission: o Commission = 15% o Mentor Payout = 85% 14. System generates receipt PDF. 15. System stores receipt under mentee's transaction history. 16. Mentee receives: o Email confirmation o In-app notification
Alternate Flows	**A1 — Payment Declined (Step 9–10)** System displays: **"Payment declined. Please try another payment method."** Session is NOT booked. **A2 — Network Error During Payment (Step 8–9)** System displays: **"Network error while processing payment. Please try again."** Session is not booked and no charge should occur. **A3 — Payment Timeout (Step 8–10)** System displays: **"Payment timeout. No charges were made."** **A4 — Mentee Cancels Payment Before Completion** Mentee clicks **Cancel**. System returns to booking page without charging. **A5 — Insufficient Funds (Gateway Response)** System displays: **"Transaction failed due to insufficient funds."**

	A6 — Duplicate Payment Attempt If mentee tries paying twice: System prevents duplicate charge and shows: **"This session is already booked."** **A7 — Email Receipt Delivery Fails (Step 14)** System logs the error and retries sending. Receipt remains available in mentee dashboard. **A8 — Currency Not Supported** System displays: **"Selected payment method does not support your currency."** **A9 — Gateway Down (Stripe/Paymob Offline)** System displays:
Postconditions	**If Successful** • Payment is processed correctly. • Session becomes **Confirmed**. • Receipt/invoice is generated and stored. • Payment confirmation notification is sent. • 15% commission is calculated. • Mentor payout is updated accordingly. • Cancelation timer stops. **If Unsuccessful** • Session remains unconfirmed. • Payment fails or times out. • If 15 minutes elapse, the system automatically cancels the pending session. • Mentor's slot reopens. • Mentee receives payment failure or timeout notice.

Feature Code	FEAT16
Name	Mentee Join Mentorship Session
Description	This feature allows a mentee to join a scheduled mentorship session at the agreed date and time using the integrated video conferencing tool (Zoom SDK) embedded in the platform. The mentee can join the session: • From the **Mentee Dashboard → Upcoming Sessions** • From the **Booking Confirmation page** • From **email notification with Join link** The system ensures: • Only **paid and confirmed** sessions can be joined.

	• The mentee joins at the correct time window. • The correct meeting room is opened using the session's unique meeting link. • The system starts the **platform-managed recording** when applicable (mentee cannot control recording).
Preconditions	• Mentee is logged in (if joining from the platform). • Session is **Booked & Confirmed** with successful payment. • Session status is **Upcoming** and scheduled time is near or reached. • Video conferencing service (Zoom SDK) is operational. • Mentee has a stable internet connection and a supported device/browser. • Meeting link and session ID exist and are associated with the booking.
Main Flow	**1. Access Upcoming Sessions** 1. Mentee logs into the platform. 2. Mentee navigates to **Dashboard → Upcoming Sessions**. 3. System displays a list of all upcoming confirmed sessions with: o Mentor name o Session date and time o Duration o Status (Upcoming) o **Join Session** button (enabled only within allowed time window). **2. Initiate Join Action** 4. At or shortly before the scheduled time, mentee clicks **"Join Session"**. 5. System validates that: o Current time is within allowed join window (e.g., from 10 minutes before start until end). o Session status is still **Upcoming** (not canceled or completed). 6. If valid, system retrieves the associated video meeting link and session token. **3. Open Video Session** 7. System opens the video session using Zoom SDK in: o An embedded frame, or o A new browser tab/window (depending on implementation). 8. System updates the session status to **In Progress** once the session officially starts. **4. Session in Progress** 9. Mentee can: o See and speak with the mentor o Share screen (if allowed) o Use in-meeting chat (Zoom's native chat, if enabled)

	10. System may automatically start recording the session (platform-side), storing it securely in cloud storage after the session.
	5. Session Completion
	11. When the meeting ends (mentor or platform ends session):
	  ○ Zoom session closes.
	  ○ System updates session status to **Completed**.
	12. System triggers:
	  ○ AI session summary generation.
	  ○ Saving of session recording (view-only for mentee/mentor later).
	13. Mentee is redirected to a **Session Completed** or **Session Summary Pending** page.

Alternate Flows	**A1 — Mentee Tries to Join Too Early (Step 4–5)** • If current time is outside allowed join window (e.g., more than 10–15 minutes before start): System displays: **"You can join this session closer to the scheduled time."** The **Join Session** button remains disabled or blocked. **A2 — Session Already Completed or Canceled (Step 5)** • If session status is **Canceled** or **Completed**: System displays: **"This session is no longer available to join."** Mentee may be redirected to **Session History**. **A3 — Invalid or Missing Meeting Link (Step 6–7)** • If the stored meeting link is missing or invalid: System displays: **"Unable to open the session. Please contact support."** • System logs an internal error for admin review. **A4 — Video Service Unavailable (Step 7–8)** • If Zoom SDK or video service cannot be reached: System displays: **"Video service is temporarily unavailable. Please refresh or try again."** **A5 — Network/Browser Issue on Mentee Side (Step 7–9)** • If the mentee's connection is unstable or browser blocks the session: System shows a generic error:

	"We could not connect you to the session. Please check your internet connection and browser settings, then try again." **A6 — Mentee Joins Late (After Start Time)** • If mentee joins after start time but before end time: System still allows join and simply connects mentee to ongoing session. No error is shown, but platform logs late join time. **A7 — Mentor Did Not Join Yet** • If mentee joins and mentor is not yet in the room: System displays an in-meeting message: **"Waiting for mentor to join."**
Postconditions	**If successful:** • Mentee is connected to the live video session with the mentor. • Session status transitions appropriately (e.g., from Upcoming → In Progress → Completed). • System-managed recording starts (if enabled) and is stored in cloud afterward. • AI session summary can be generated after session completion based on recording/transcript. **If unsuccessful:** • Mentee is not connected to the session. • Session status remains unchanged. • Mentee sees a meaningful error message or guidance.

Feature Code	FEAT17
Name	Mentee Session Notifications
Description	This feature allows the system to send automated and real-time notifications to the mentee regarding all important events related to their mentorship sessions. Notifications inform the mentee about booking confirmations, reminders, cancellations, reschedules, session start alerts, and AI summary availability. Notifications are delivered through: • **Email** • **In-app notifications** • **Optional SMS** (if enabled in system configuration) The purpose is to ensure the mentee stays informed, attends sessions on time, and is aware of any updates or actions required.
Preconditions	• Mentee has an active, verified account. • Mentee is logged in (for viewing in-app notifications).

<table>
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A mentorship session exists and is linked to the mentee.
System notification service (email/SMS/push) is operational.
Mentee has allowed notifications (email required; others optional based on settings).

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<tr><td>Main Flow</td><td>
1 Event Triggers for Notifications

A mentee books a session.
System sends Booking Confirmation notification immediately.
Session is approaching (24 hours before start).
System sends Session Reminder 24H.
Session is approaching (1 hour before start).
System sends Session Reminder 1H.
Session is starting (at the exact start time).
System sends “Your session is starting now” and displays a Join Button.
Mentor reschedules the session.
System sends Reschedule Notification with updated date/time.
Mentor or admin cancels the session.
System sends Cancellation Notification and refund information (if applicable).
Session ends and recording is processed.
System sends Recording Ready notification (view-only).
AI summary is generated.
System sends AI Session Summary Available notification.
Mentee receives a new message in chat (if chat is unlimited).
System sends New Message notification.
Payment issues occur (optional).
System sends Payment Failed or Refund Issued notifications.

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<tr><td>Alternate Flows</td><td>
A1 — Notification Delivery Fails (Step 1–10)

Email or SMS cannot be delivered due to provider outage or invalid email.
System marks notification as Failed.
System retries delivery based on retry policy (e.g., 3 attempts).
If still failed, system logs the error for admin review.

A2 — Mentee Has Disabled Optional Notifications

If mentee has turned off SMS or push notifications:
Only in-app and email notifications are sent.
No error is shown to the mentee.

A3 — Mentee Tries to View Notification While Logged Out (Step 11–15)

Mentee clicks a notification link from email.

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	• System detects the mentee is logged out.
	• System redirects to **Login Page**.
	• After login, system redirects to the intended notification action page.
	
	A4 — Invalid or Expired Notification (Step 15)
	• If the linked page (e.g., old session page) is no longer available:
	    ○ System shows message:
	    "This notification is no longer valid."
	
	A5 — Repeated Notifications Blocked by System Rules
	• System prevents duplicate reminders (e.g., two 1-hour reminders).
	• Notification is skipped automatically.

Postconditions	**If successful:** • Relevant notifications are sent to the mentee. • Notification entry is stored in the system for later viewing (in-app). • Notification status is marked as "Delivered" or "Read" as applicable. **If unsuccessful:** • Notification is marked as "Failed." • Admin may see failure logs. • Session status remains unaffected.

Feature Code	**FEAT18**
Name	Mentee Session History and Payment Details
Description	This feature allows mentees to view a complete history of all mentorship sessions they have booked on the platform, including their **status**, **mentor details**, **session date/time**, **AI summary**, **recording**, and **payment information**. The Session History page provides mentees with: • List of all sessions (Completed, Canceled, Upcoming, No-Show, Expired) • Access to session details • AI session summary • Session recording stored in the cloud (view-only, no download) • Payment details (amount, payment method, commission, refund status) • Invoice/receipt download • Ability to leave a rating/review (if completed and not yet reviewed)

	This feature ensures transparency, centralization of mentorship records, and easy access to financial history.
Preconditions	• Mentee is logged in. • Mentee has at least one session in the system. • Payment records exist for paid sessions. • Session statuses (Completed, Canceled, etc.) are correctly updated by system logic. • AI Summary and Recording features (if applicable) have finished processing. • Cloud storage access for recordings is functioning.
Main Flow	**1. Access Session History** 1. Mentee logs into the system. 2. Mentee navigates to **Dashboard → Session History**. 3. System retrieves all session records linked to the mentee. 4. System displays sessions in chronological or filtered order: o Upcoming o Completed o Canceled o No-Show o Expired Each session card includes: • Mentor name & profile photo • Session type (30 min / 1 hr) • Date & time • Status • "View Details" button **2. View Session Details** 5. Mentee clicks **View Details** for a specific session. 6. System retrieves full session information, including: o Mentor information o Booking date o Session duration o Meeting link o Session status o AI Summary (if generated) o Recording (view-only) o Chat access o Payment breakdown o Refund information (if applicable)

	7. System displays the detailed session page. **3. AI Summary Access** 8. If AI summary exists, system displays **"View AI Summary"**. 9. Mentee clicks to view summary. 10. System displays summary text, key points, and recommended action items. **4. Recording Access (View-Only)** 11. If system-recorded session exists, system displays **"View Recording"**. 12. Mentee clicks the link. 13. System opens secure video player (streaming only, no download). 14. Recording is streamed from cloud storage. **5. Payment Details & Invoice** 15. Mentee scrolls to **Payment Details** section, which includes: o Total Amount Paid o Payment Method (Stripe, Paymob, wallet, etc.) o Platform Commission o Mentor Payout Amount o Payment Status (Success, Failed, Refunded) 16. Mentee clicks **Download Invoice** (PDF). 17. System generates invoice and downloads file. **6. Review Mentor (If Eligible)** 18. If session is "Completed" and no review exists yet: o System displays **"Rate Mentor"** button. 19. Mentee clicks button and submits rating/review.
Alternate Flows	**A1 – No Session History Available (Step 3–4)** • System finds no session records. → Display: **"You have no previous or upcoming sessions."** **A2 – Recording Not Available Yet (Step 11)** • Recording is still processing or failed. → System displays: **"Recording is not available at the moment."**

	A3 – AI Summary Still Processing (Step 8) • AI summary not yet generated. → Display: **“AI summary is being generated. You will be notified once it’s ready.”** **A4 – Failed to Load Payment Details (Step 15)** • Payment service unavailable. → System displays: **“Payment details cannot be displayed right now.”** **A5 – Invoice Generation Error (Step 17)** • System fails to generate invoice. → Error message: **“Unable to download invoice. Please try again later.”** **A6 – Unauthorized Access Attempt** • Mentee tries to access session belonging to another user. → Redirect to dashboard + show error: **“You are not authorized to view this session.”** **A7 – Network Timeout While Viewing Recording (Step 13–14)** • Playback fails due to slow connection. → Display: **“Connection issue. Please check your internet and try again.”**
Postconditions	**If Successful** • Session list is displayed correctly. • Mentee can view session details and payment information. • Mentee can open AI summary and recording (view-only). • Mentee can download receipts (PDF). • Mentee can leave a review (if eligible). **If Unsuccessful** • Page may show: “No sessions found.” • Missing or failed components (e.g., recording not available) show fallback messages. • System logs any internal load/display issues for admin review.

System Features

Feature Code	FEAT19
Name	AI Session Summarization
Description	The system generates an AI-based session summary after each completed mentorship session, providing key discussion points, recommended next steps, and action items for both the mentor and mentee.
Preconditions	• The mentorship session has been completed successfully. • The system has access to session metadata (date, duration, mentor/mentee IDs). • The system has access to the session transcript or meeting notes. • AI summarization service is online and reachable. • User (mentor/mentee) is logged in to view the summary.

Main Flow	1. **Session Completion Trigger**
	  o The system detects that the session status has changed to "Completed".
	2. **Transcript Collection**
	  o The system retrieves the session transcript from the Zoom SDK or stored notes.
	  o If a transcript is unavailable, the system retrieves chat logs instead.
	3. **Content Pre-Processing**
	  o The system cleans the transcript (removing timestamps, filler words, system notifications, etc.).
	  o The system identifies speaker labels (Mentor / Mentee).
	4. **AI Summarization Request**
	  o The system sends the processed transcript to the AI summarization engine.
	  o The request includes session ID, mentor ID, and mentee ID.
	5. **AI Generates Summary**
	  o The AI produces a structured summary containing:
	  • Key discussion topics
	  • Mentor's recommendations
	  • Action items for the mentee
	  • Suggested next steps
	  • Optional learning resources
	6. **System Saves Summary**
	  o The summary is stored securely in the database under the session record.
	7. **Summary Display**
	  o The system notifies both the mentor and mentee that a summary is ready.

	○ Users can access the AI summary from: • Session history page • Session details screen 8. **Optional User Feedback** ○ The system allows the mentee to rate whether the summary was helpful. ○ This feedback is stored to improve future AI summaries.
Alternate Flows	**A1 – Transcript Not Available (Step 2):** • If no transcript or chat data is found, the system displays: **"Session summary unavailable: No transcript detected."** • System marks summary status as *Failed – No Data*. **A2 – AI Summarization Engine Error (Step 5):** • If AI service fails or times out, the system displays: **"The summary could not be generated. Please try again later."** • System retries automatically up to 3 times. • Error is logged in the admin audit logs. **A3 – Restricted Content Detected (Step 5):** • If AI detects sensitive or inappropriate topics, the system: ○ Flags the summary for manual admin review. ○ Sets status to *Pending Admin Approval*. ○ Notifies admin. **A4 – User Attempts to View Before Summary Is Ready (Step 7):** • System displays: **"Your AI session summary is being prepared."** • Users must wait until processing is complete.
Postconditions	• A structured AI-generated summary is stored under the session's history. • Both mentor and mentee can view the summary at any time. • Summary availability improves user reflection, learning, and mentorship follow-up. • System logs are updated for auditing and analytics.

Feature Code	FEAT20
Name	Session Recording & Cloud Storage Upload
Description	The system records mentorship sessions (with consent) and automatically uploads encrypted video files to secure cloud storage. Both parties can access the recording from the session history for a limited retention period. Recording availability and access permissions are fully governed by platform policies.
Preconditions	• Session is live and conducted via the integrated Zoom SDK.

	• Mentor and mentee have enabled **recording consent**. • Cloud storage service (Azure Blob Storage) is online. • User (mentor/mentee/admin) is logged in to view the recording.

Main Flow	1. **Recording Initialization**
	    ○ At the session start, the system checks if both users have enabled "Allow Recording".
	    ○ The system sends an automated request to Zoom SDK to begin recording.
	2. **Recording During Session**
	    ○ Zoom SDK captures video, audio, and shared screen content.
	    ○ System displays a "Recording Active" indicator to both parties.
	3. **Session Ends → Recording Finalization**
	    ○ Zoom SDK finalizes the recording file and sends it to the platform's backend.
	4. **Cloud Upload**
	    ○ The system uploads the recording to Azure Blob Storage via secure API.
	    ○ File is stored in an encrypted format with a unique session-based folder structure.
	5. **Link Generation**
	    ○ The system generates a secure, time-limited access URL.
	    ○ URL is stored in the session record in the database.
	6. **User Access**
	    ○ Mentor and mentee can view the recording link in their session history.
	    ○ The recording can be streamed but **not downloaded** (platform policy).
	7. **Retention Policy Enforcement**
	    ○ Recording is automatically deleted after the configured retention period (e.g., 7 or 30 days).
	    ○ Users receive a "Recording Expiring Soon" notification 24 hours before deletion.

Alternate Flows	**A1 – Recording Disabled (Step 1):**
	• If either user did not consent, the system disables recording for the session.
	• Recording icon is not displayed.
	• No recording file is generated.
	A2 – Upload Failure (Step 4):
	• If cloud upload fails, the system retries 3 times automatically.
	• If still failing:
	    ○ System logs an error.
	    ○ Admin is notified.
	    ○ System displays: "Recording unavailable due to upload issue."

	A3 – Unauthorized Access Attempt (Step 6): • If a user without permission attempts to access the recording, the system displays: **“You do not have permission to view this recording.”** **A4 – File Corrupted (Step 5):** • System detects incomplete or corrupted recording. • Marks recording status as **Failed**. • Displays: **“Recording unavailable due to technical error.”**
Postconditions	- Recording is successfully uploaded and linked to the session history. - Users have secure, temporary access to view the session recording. - Cloud storage retention rules are applied, and expired recordings are deleted automatically. - Admin can view recording logs for audit and compliance.

Feature Code	**FEAT21**
Name	Secure Payments and Commission Calculation
Description	securely pay for mentorship sessions while ensuring accurate commission calculation for CareerRoute. Payments are processed through: • **Stripe** (international: Visa, Mastercard, PayPal, Apple Pay) • **Paymob** (Egypt/MENA: Meeza, InstaPay, Vodafone Cash, etc.) For each successful payment: • A **session booking** is confirmed • **15% platform commission** is automatically calculated • The remaining amount is allocated to the mentor’s payout wallet • A **receipt/invoice** is generated • Payment logs are stored for audit purposes The system ensures all payments are encrypted, traceable, and securely stored according to compliance requirements.
Preconditions	• Mentee is logged in. • Mentor profile is active and approved. • Session is available for booking and has a valid price. • Payment provider (Stripe/Paymob) is operational. • Mentee has a valid payment method and sufficient balance. • System is able to calculate platform commission (15%).
Main Flow	**1 Initiating Payment** 1. Mentee selects a mentor and chooses a session slot. 2. System displays the session price, tax (if any), and total amount.

3. Mentee clicks **“Proceed to Payment”**.
4. System prompts mentee to select payment method:
    - Stripe
    - Paymob

4.2 Payment Processing

5. System redirects mentee to secure payment gateway (Stripe/Paymob).
6. Mentee enters payment details or confirms saved method.
7. Payment gateway validates card/wallet/tokenized payment data.
8. If valid, payment gateway authorizes the transaction.

4.3 Post-Payment Handling

9. Payment gateway sends callback/webhook to platform.
10. System updates payment status to:
    - **Success**
    - **Failed**
    - **Pending** (rare case)
11. If **Success**:
    - System creates session booking and sets status **Confirmed**.
    - System calculates platform commission (15%).

4.4 Commission & Payout Allocation

12. System calculates:
    - **Commission = Total Price × 15%**
    - **Mentor Payout = Total Price − Commission**
13. System stores:
    - Transaction ID
    - Commission amount
    - Mentor payout amount
    - Payment method
    - Timestamps
    - Currency
14. Mentor’s payout wallet is updated (payout processed after 72 hours).

4.5 Receipt Generation

15. System generates invoice/receipt in PDF format.
16. System attaches receipt to session record and sends email to mentee.

	4.6 Notifications 17. Mentee receives **Payment Success** + **Session Confirmed** notifications. 18. Mentor receives notification of a **New Session Booking**.
Alternate Flows	**A1 – Payment Authorization Failed (Step 7–8)** • Payment provider declines card or wallet. → System displays: **“Payment was declined. Please try another method.”** **A2 – Gateway Timeout (Step 7)** • Payment gateway does not respond. → Status = Pending → System displays: **“We are verifying your payment. You will receive an update shortly.”** **A3 – Payment Succeeds but Session Creation Fails (Step 11)** • Rare case: payment succeeds but system error occurs. → System stores payment as **Captured** → System triggers admin alert → Admin manually assigns booking or refunds user **A4 – Incorrect Commission Calculation (Step 12)** • If commission logic fails: → System blocks payout → Marks payment “Review Required” → Admin notified **A5 – Payment Cancelled by User (Before Step 7)** • Mentee closes gateway window. → Session not created → Status is **Cancelled by User** **A6 – Refund Scenario** • Mentor cancels session OR • Mentee cancels within allowed refund policy

	→ System calculates refund based on policy: • 100% refund • 50% refund • No refund → Refund processed automatically through Stripe/Paymob
Postconditions	**If Payment is Successful:** • Session booking is created with status **Confirmed**. • Payment status updated to **Success**. • Commission (15%) and mentor payout (85%) are recorded. • Receipt/invoice is generated and stored. • Mentee and mentor receive confirmation notifications. • Payment entry added to the **Financial Transactions Log**. **If Payment Fails:** • No booking is created. • Payment status stored as **Failed** or **Pending**. • Error is logged. • Mentee receives failure notification.

Feature Code	**FEAT21**
Name	Email and In-App Notifications
Description	This feature enables CareerRoute to send system-generated **email notifications** and **in-app notifications** to mentees, mentors, and administrators whenever important events occur. The notification system ensures timely communication, improved user engagement, and seamless tracking of actions across the platform. The system sends notifications for: • Account registration & verification • Password reset • Mentor approval/rejection • Session booking confirmations • Session reminders (24H, 1H, Start Time) • Session rescheduling or cancellation • Recording availability • AI session summary availability • Payment success or failure • New chat messages • Admin announcements • System alerts

	In-app notifications are displayed via a notification bell icon, while email notifications are delivered using integrated email service providers (e.g., SendGrid).
Preconditions	• User must have a registered account (for personalized notifications). • Email service provider must be operational. • In-app notification service and database must be functioning. • User has not disabled optional notifications (only mandatory notifications cannot be turned off). • System events that trigger notifications must occur (e.g., booking, approval).

Main Flow	**1 Triggering Notifications**
	1. An event occurs (e.g., session booked, mentor approval, password reset).
	2. System identifies required notification type and recipients.
	3. System loads the appropriate template in the selected user language.
	
	4.2 Sending Email Notifications
	4. System prepares the email using the template (dynamic fields: user name, session details, etc.).
	5. System sends the email through the email provider (e.g., SendGrid).
	6. Email provider returns delivery status.
	7. System logs status:
	    ○ **Delivered**
	    ○ **Failed**
	    ○ **Queued**
	8. User receives the email and can click embedded links (login, join session, view summary, etc.).
	
	4.3 Sending In-App Notifications
	9. System creates an in-app notification record with:
	    ○ Title
	    ○ Body text
	    ○ Timestamp
	    ○ Status (Unread)
	    ○ Link to relevant action page (optional)
	10. Notification is displayed under the **Notification Bell** in the header.
	11. User clicks the bell icon to open the notification list.
	12. User selects a notification to view details.
	13. System marks notification as **Read**.
	
	4.4 Notification Storage & Logs

	14. System stores notification history for each user. 15. Admins can view logs for debugging or audit.
Alternate Flows	**A1 – Email Delivery Failure (Step 6–7)** • Email provider rejects or fails to deliver. → System retries up to 3 times. → If still failed, status = **Failed**, logged for admin. **A2 – User Blocks Emails** • User disables optional emails. → Only in-app notifications are created. → Mandatory notifications (e.g., password reset) still sent. **A3 – User Not Logged In (Step 11–12)** • If user clicks notification link from email but is logged out: → System redirects to login page. → After login, redirects to intended location. **A4 – Missing or Corrupted Notification Template** • System cannot load template. → System uses fallback minimal English template. → Logs translation error. **A5 – Notification Linked to Deleted Content (Step 12)** • User opens a notification (e.g., old session removed). → System shows: **"This item is no longer available."** **A6 – In-App Notification Service Down** • System cannot create in-app notifications. → Only email is sent. → Error logged for admin.
Postconditions	**If Successful** • Email notification is sent to the user's registered email. • In-app notification is created and displayed in the notification center. • Notification delivery status is stored as **Delivered** or **Read**. • System logs are updated for audit and troubleshooting.

	If Unsuccessful • Notification is marked as "Failed." • System retries sending notifications based on retry policy. • Failure is logged for admin review.

Feature Code	FEAT22
Name	Data Encryption for Security
Description	This feature ensures that all sensitive data handled by the CareerRoute platform is encrypted both **at rest** and **in transit**, protecting user information, session data, credentials, payment information, chat messages, and system logs from unauthorized access or interception. Encryption standards apply to: **In Transit (client ↔ server):** • TLS 1.2+ • HTTPS for all platform pages • Encrypted WebSocket connections for real-time chat **At Rest (database, storage, backups):** • AES-256 encryption for stored data (profiles, documents, AI summaries, audit logs) • Encrypted cloud storage (recordings, uploaded documents) • Hashed + salted passwords using ASP.NET Identity standards **Special Handling:** • Payment data is never stored locally—handled by Stripe/Paymob • Uploaded documents (ID, CV, certificates) stored in encrypted cloud storage • Access control ensures that decryption keys are never exposed to normal users This feature is essential for protecting user privacy, complying with security standards, and maintaining platform trust.
Preconditions	• Platform is running on HTTPS with a valid SSL certificate. • Encryption keys are securely generated, stored, and rotated. • Database and cloud storage support encryption. • API gateways/environments are configured for secure communication. • Sensitive fields (passwords, documents, recordings) are identified as requiring encryption.
Main Flow	**1 Encryption in Transit** 1. User (mentor/mentee/admin) opens the platform in a browser or mobile app. 2. System automatically forces connection over **HTTPS (TLS 1.2+)**. 3. All API requests (login, sessions, payments, profile updates) are encrypted in transit. 4. Chat messages use encrypted WebSockets (WSS).

	5. When sending external requests (Stripe/Paymob/Zoom), system uses secure HTTPS channels.
	
	4.2 Encryption at Rest – Database
	6. User submits sensitive data (passwords, profile details, documents, session history).
	7. Before saving, system applies:
	    o AES-256 encryption for sensitive fields
	    o One-way hashing with salt for passwords
	8. Data is saved in the encrypted database/storage.
	
	4.3 Encryption at Rest – Cloud Storage
	9. Mentor uploads documents (ID, CV, certificates).
	10. System encrypts files before uploading OR uses encrypted cloud storage containers.
	11. Session recordings are uploaded to encrypted cloud storage (view-only, no download).
	12. AI session summaries stored encrypted in database.
	
	4.4 Key Management
	13. System retrieves encryption keys stored in secure key vault (Azure Key Vault).
	14. System decrypts data only when required (e.g., viewing a recording).
	15. Key rotation policies ensure keys are updated regularly.
	
	4.5 Logging & Monitoring
	16. System logs encryption success or failure without storing sensitive data.
	17. Admin can monitor encryption health through security logs.

Alternate Flows	**A1 – SSL Certificate Invalid (Step 1–3)** • SSL certificate expires or becomes invalid. → System blocks all connections. → Redirects to "Secure Connection Required" page. → Admin is alerted immediately. **A2 – Encryption Key Retrieval Failure (Step 13–14)** • Key vault inaccessible. → System prevents data decryption. → Displays: **"A temporary security issue occurred. Please try again later."** → Logs incident as critical.

	A3 – Payment Attempt Without Secure Connection • If mentee attempts payment via insecure channel. → System blocks action: **"Secure connection required for payments."** **A4 – Failed File Encryption (Step 10)** • Document or recording fails encryption. → Upload is aborted. → System shows: **"The file could not be uploaded securely. Please try again."** **A5 – Data Export by Admin** • Admin exports logs or data. → System encrypts export file. → Admin must decrypt using authorized credentials
Postconditions	**If Successful** • All sensitive data transmitted between devices and servers is encrypted. • Sensitive stored data is encrypted automatically in the database/storage. • Only authorized system components or users with correct permissions can access decrypted data. • System logs contain no plaintext sensitive information. **If Unsuccessful** • Data remains unencrypted or partially encrypted. • System logs error or security alert. • Admin may be notified of misconfiguration or failure

Feature Code	**FEAT23**
Name	Refund Policy Management
Description	This feature manages all refund-related operations on the CareerRoute platform. It ensures that mentees receive the correct refund amount according to the platform's defined policy, and that mentors and admins have clear visibility of refund decisions. The system supports refunds under the following conditions: **Refund Rules:** • **100% Refund** → If mentee cancels **48+ hours** before the session. • **50% Refund** → If mentee cancels **24–48 hours** before the session. • **No Refund** → If mentee cancels **less than 24 hours** before the session.

	• **100% Refund** → If mentor cancels at any time. • **Admin-initiated Refund** → In case of disputes or special circumstances. Refunds are processed automatically through the payment provider (Stripe/Paymob) and logged in the system for transparency. Refund status updates are communicated to both mentee and mentor via email and in-app notifications.
Preconditions	• Session must have a successful payment on record. • Session must be in a refundable state (not completed, not already refunded). • Cancellation or refund trigger must occur (mentee cancellation, mentor cancellation, or admin decision). • Payment provider (Stripe/Paymob) must be operational. • The platform must have access to the original transaction ID for refund.

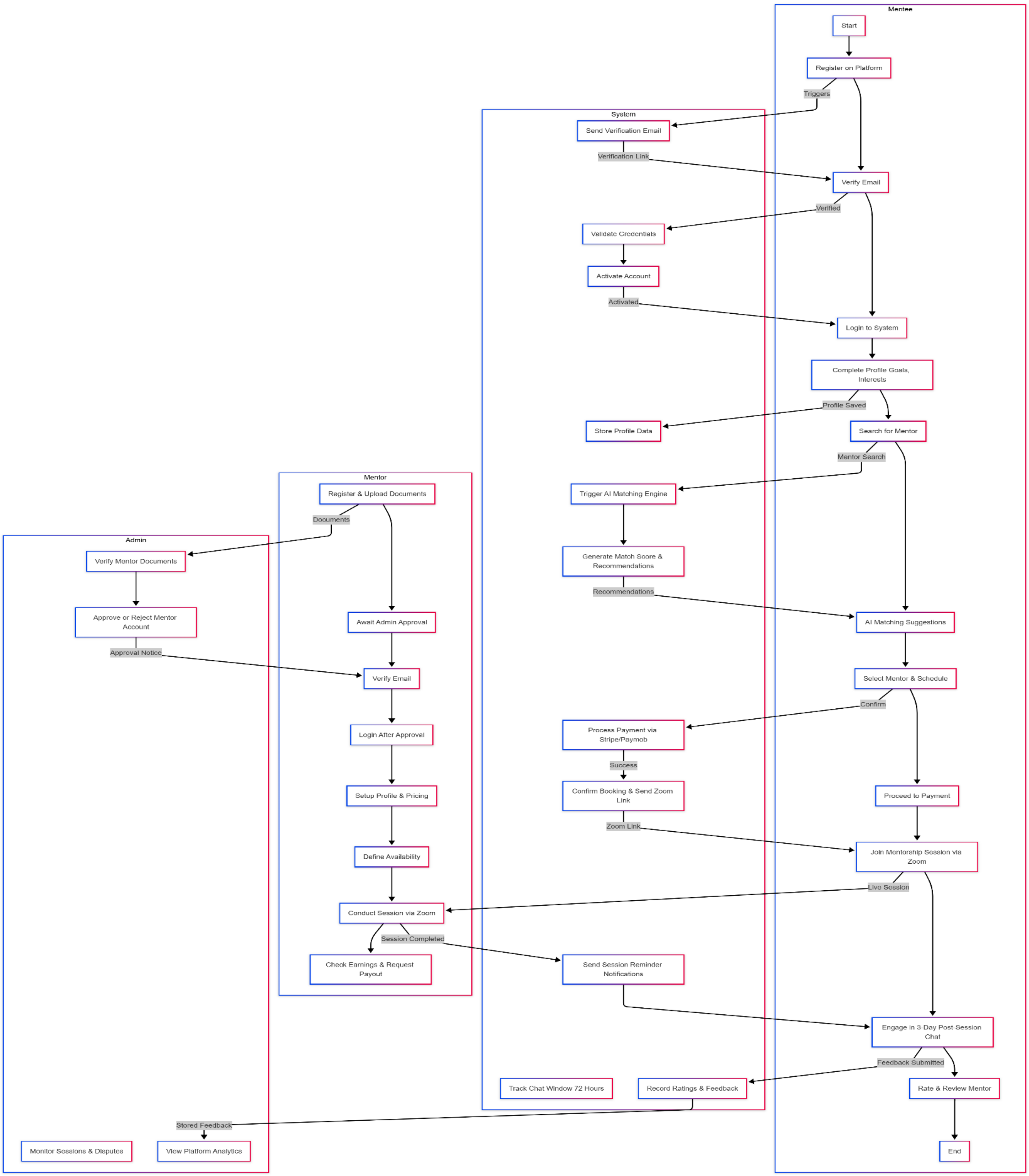
Main Flow	**1. Triggering Refund**
	1. A refund-trigger event happens:
	  ○ Mentee cancels session.
	  ○ Mentor cancels session.
	  ○ Admin approves dispute-based refund.
	2. System retrieves:
	  ○ Session details
	  ○ Payment status
	  ○ Booking timestamp
	  ○ Session start time
	3. System calculates time difference from the session start.
	
	2. Refund Calculation
	4. System determines refund percentage based on rules:
	  ○ ≥48 hours → 100% refund
	  ○ 24–48 hours → 50% refund
	  ○ <24 hours → 0% refund
	  ○ Mentor cancellation → 100% refund
	  ○ Admin override → Custom refund amount
	5. System computes actual refund amount:
	  ○ **Refund = Paid Amount × Refund Percentage**
	6. System prepares refund request to payment provider.
	
	3. Refund Processing
	7. System sends refund request to Stripe/Paymob with:

	◦ Transaction ID ◦ Refund amount ◦ Reason code 8. Payment provider returns: ◦ **Success** ◦ **Failed** ◦ **Pending** 9. System updates refund status accordingly. **4. System Updates** 10. System updates session status to: ◦ **Refunded** ◦ **Partially Refunded** ◦ **Refund Pending** 11. System adjusts mentor payout (if already scheduled). 12. Refund transaction is logged in financial reports. 13. System sends notifications to mentee and mentor.
Alternate Flows	**A1 – Refund Not Allowed (Step 4)** • Mentee cancels <24 hours before session start. → System displays: **“This session is not eligible for a refund.”** → No refund is processed. **A2 – Payment Provider Fails to Process Refund (Step 8–9)** • Payment gateway returns failure. → System marks refund as **Failed**. → System notifies admin. → Admin may retry manually. **A3 – Missing Transaction ID (Step 7)** • Original payment record incomplete or corrupted. → System blocks refund and alerts admin: **“Refund cannot be processed due to missing payment data.”** **A4 – Mentor Cancels After Payout Scheduled**

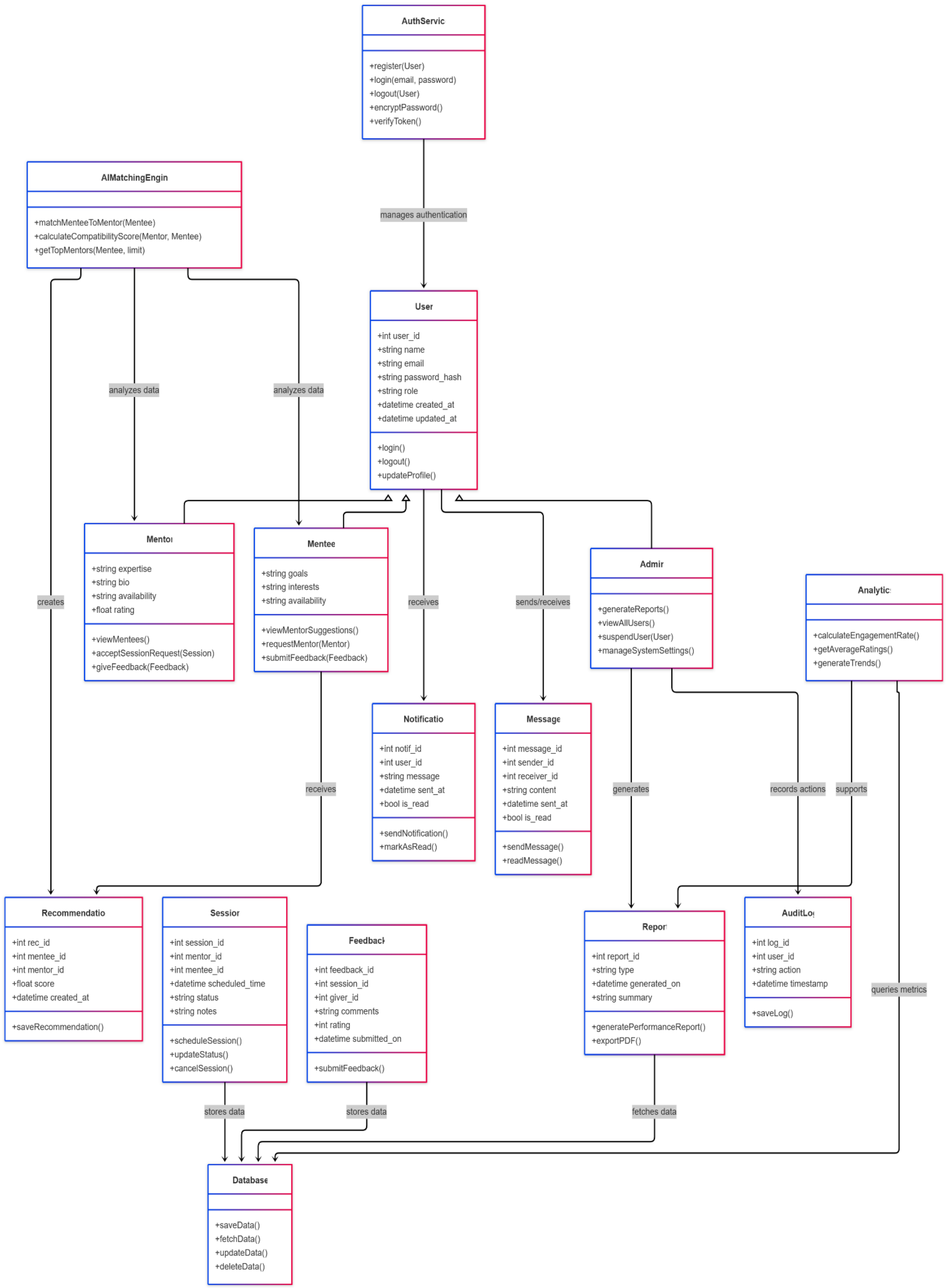
	• Mentor cancellation happens close to payout period. → System cancels scheduled payout. → 100% refund is issued to mentee. **A5 – Admin Applies Custom Refund (Step 4)** • Admin overrides policy due to dispute. → Custom refund amount is entered. → System processes custom refund normally. **A6 – Refund Already Processed** • Mentee tries to request refund twice. → System shows: **“Refund already processed for this session.”**
Postconditions	**If Successful** • Refund request is processed by the payment provider. • Refund amount is calculated according to policy. • Session status updates to: ○ **Refunded**, **Partially Refunded**, or **Refund Pending**. • Mentee receives refund confirmation. • Mentor payout is adjusted accordingly. • Refund entry is added to **Financial Transaction Log**. **If Unsuccessful** • Refund request is marked as **Failed**. • System logs error details. • Admin is notified to take manual action.

UML MODEL

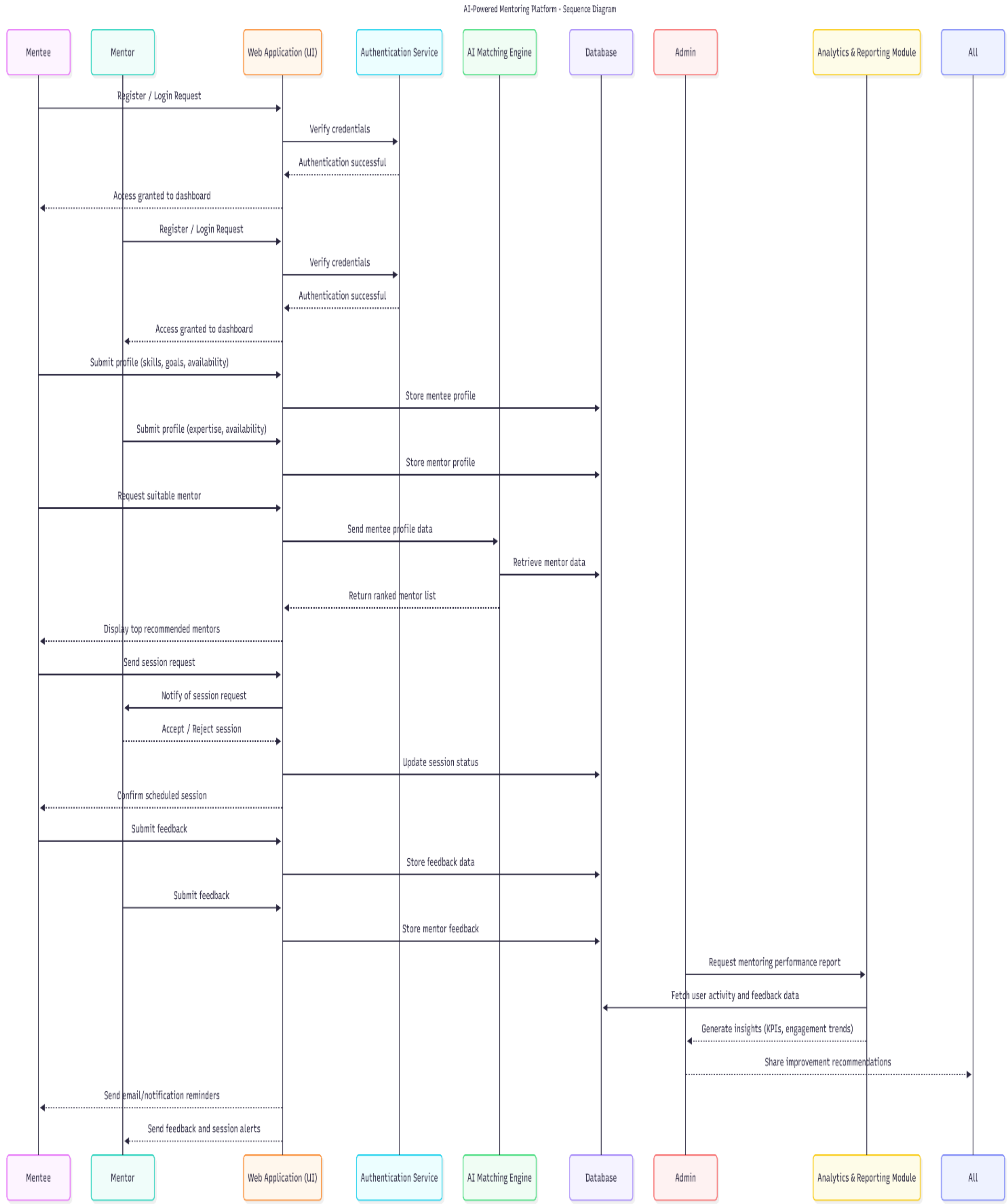
I. Activity Diagram



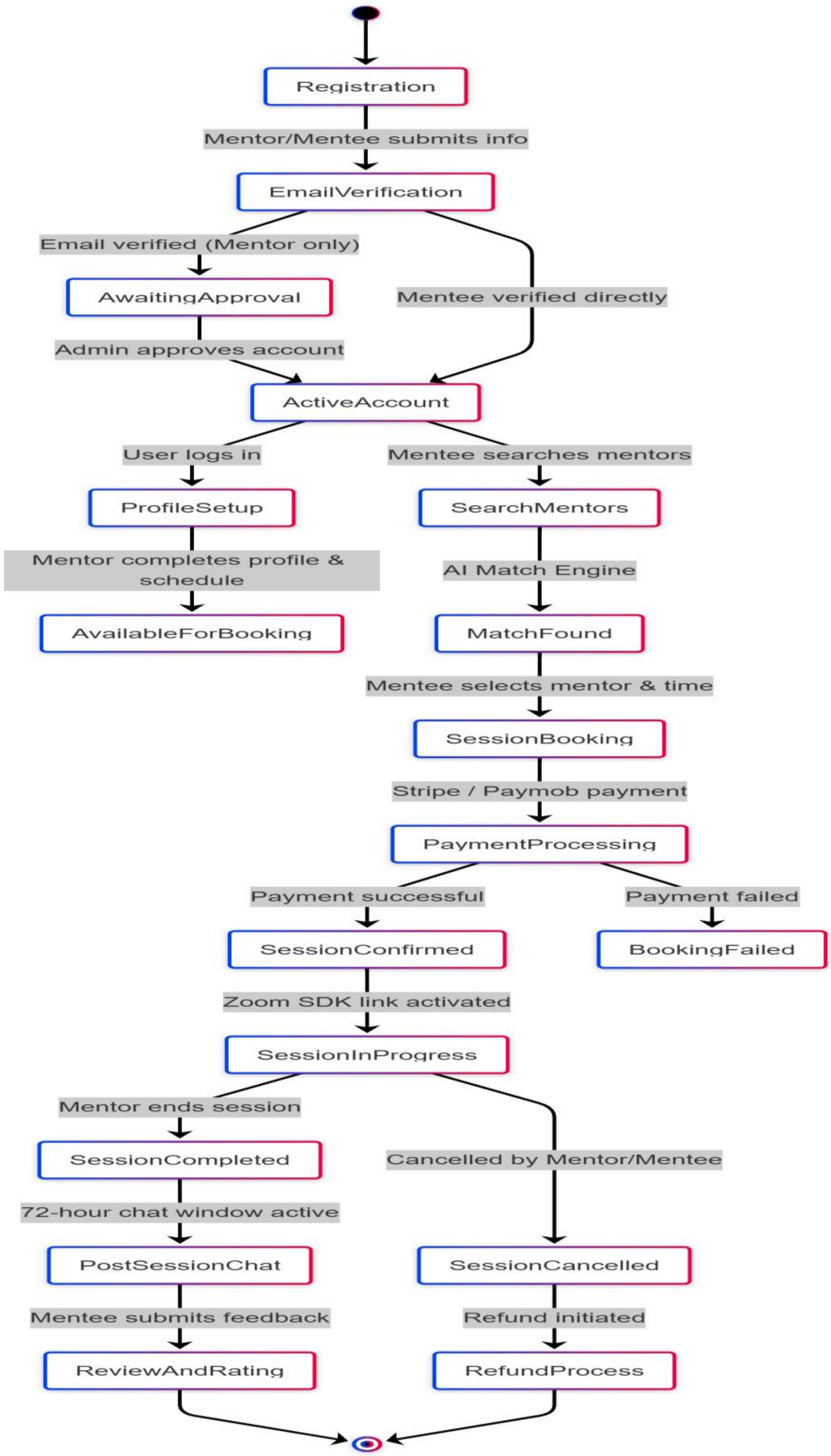
II. Class Diagram



III. Sequence Diagram



IV. State Diagram



Non-Functional Requirements

1. Performance

- The system must load all platform pages (web) in less than **3 seconds** for 95% of requests.
- The platform must support up to **10,000 active users** (mentors, mentees, admins) concurrently without performance degradation.
- AI-powered mentor matching and session bookings should be processed with minimal delays (<2 seconds).

2. Availability & Reliability

- Uptime: The system must have **99.9% uptime** during active hours.
- Backups: Daily backups of the system with recovery options up to the last **24 hours**.
- Failover: The system should ensure continuity in case of technical failures (automatic failover).

3. Security

- All data must be **encrypted** in storage and during transfer using **TLS/SSL** encryption protocols.
- Role-based access control (RBAC) must be implemented, restricting access based on user roles such as **Admin**, **Mentor**, and **Mentee**.
- The system must maintain **audit trails**, logging all user actions, such as profile updates, session bookings, and payments.
- **Multi-Factor Authentication (MFA)** must be available and mandatory for **Admin** accounts to enhance security.

4. Compliance

- The system must comply with **local data privacy laws** in the **MENA region**.
- All **payment transactions** should comply with **PCI-DSS** standards.

5. Scalability

- The system must handle growth from **1 region** to **50+ regions**, scaling seamlessly to accommodate new users and mentors.
- **Additional features** (e.g., group sessions, new mentor categories) should be added without modifying the core system.
- The system must support **cloud-ready deployment**, capable of scaling resources (CPU, storage) up or down depending on user demand.

6. Usability

- The **user interface** must be **simple** and **intuitive** for all users (Mentors, Mentees, Admins), including those with **basic technical skills**.
- The platform must support a **multi-language interface** (at least **Arabic and English**) for regional accessibility.

7. Maintainability & Support

- **Modular Design**: The system must be built using **modular components**, making it easy to add features or fix bugs without downtime.
- **System Logs & Monitoring**: **Admins** should have access to logs and monitoring dashboards to track performance and errors.
- **Documentation**: **User manuals** and **technical documentation** must be available in **Arabic and English**.
- **Support & Maintenance**: **1 year of support and maintenance** will be provided after launch, with an option for renewal.

8. Deployment & Hosting

- The solution should be deployable on **cloud (Azure)** or **on-premises**, based on client preferences or organizational policy.
- Separate **development**, **testing**, and **production environments** should be used to ensure security, quality, and scalability.