User Stories for Time-Tracking System

User Story 1: Sign Up

- **As a** new user (end user, freelancer, employee, manager, or owner),
- **I want to** sign up and create my account,
- **So that** I can access the platform securely.

Success Criteria

- User enters valid details (email/phone, password, role if required).
- System creates the account and sends confirmation (email/OTP).
- User receives a success message and can log in.

Failure Criteria

- If email/phone already exists → show "Account already exists."
- If password doesn't meet strength requirements → show error.
- If OTP/email verification fails → prevent account activation.

User Story 2: Login

- **As a** registered user,
- **I want to** log in using my credentials,
- **So that** I can securely access my account.

Success Criteria

- User enters correct email/username and password.
- System authenticates and redirects to dashboard.
- Login session is created securely.

Failure Criteria

- If credentials are invalid → show "Incorrect username or password."
- If account is inactive/not verified → show "Please verify your account."
- If too many failed attempts → temporarily lock account.

User Story 3: Password Reset

- **As a** user who has forgotten my password,
- **I want to** reset it through a secure flow,
- **So that** I can regain access to my account.

Success Criteria

- User clicks “Forgot Password.”
- System sends password reset link/OTP.
- User sets a new strong password.
- System confirms password reset and allows login.

Failure Criteria

- If email/phone is not registered → show “Account not found.”
- If OTP/link is expired/invalid → show error.

User Story 4: Role-Based Access Control

- **As a** system user
- **I want** to access only the data and features relevant to my role
- **So that** sensitive information is not exposed unnecessarily

Acceptance Criteria

- Freelancers can view/edit only their own tasks, time entries, and expenses.
- Project managers can view/edit tasks, budgets, and reports only for projects they manage.
- Clients can only view invoices, feedback, and reports related to their projects.
- Business admins can view all data.
- Unauthorized access → "You do not have permission to view this data."

User Story 5: Data Privacy & Encryption

- **As a** system user
- **I want** my data to be encrypted during storage and transmission
- **So that** my information remains secure and private

Acceptance Criteria

- All sensitive data (invoices, payment methods, time logs) is encrypted in database.
- All traffic uses HTTPS (TLS).
- Attempted insecure connection → "Secure connection required."

User Story 6: Archive a Project

- **As a** User,
- **I want to** archive completed projects
- **So that** my active project list remains clean.

Success Criteria:

- User selects completed project.
- System archives project and hides from active view.
- Data still available in archived reports.

Failure Criteria:

- Project not found → "Project does not exist."
- Already archived → "This project is already archived."
- Unauthorized → "You do not have permission to archive."
- System error → "Failed to archive project. Retry later."

User Story 7: AI-Powered Categorization of Tasks & Projects

- **As a** user (employee, project manager, or admin),
- **I want** the system to automatically categorize my tasks and projects using AI,
- **So that** I can save time on manual classification and focus on my work.

Success Criteria:

- When a task/project is created or logged, the AI suggests a category (e.g., Meeting, Development, Client Work, Research).
- Users can accept or override the AI's suggestion.
- System continuously learns from user corrections to improve accuracy.
- Categories are reflected consistently in dashboards, reports, and analytics.

Failure Criteria:

- If AI cannot categorize → show "Uncategorized. Please select manually."
- If system confidence is low → notify user for confirmation.
- If categorization service is unavailable → "AI categorization failed. Try again later."

User Story 8: Mobile Accessibility

- As an employee,
- I want to access the time-tracking system on mobile devices,
- so that I can log hours while working remotely.

Success Criteria:

- Mobile-responsive UI, offline logging works.

Failure Criteria:

- Unsupported device/browser → "Your device is not supported."

User Story 9: Export Reports

- **As a** project manager
- **I want** to export reports (utilization, timesheets, progress) to Excel/PDF
- **So that** I can share them with stakeholders

Acceptance Criteria:

- Select report → export format (PDF, CSV, XLSX)
- Error: "Failed to export report."

User Stories for End-Users (Freelancers, Employees)

User Story 1. Automatic Time Capture

- **As an** employee,
- **I want** the system to provide an auto start/stop timer,
- **So that** I don't forget to log my hours.

Success Criteria:

- Timer starts with system activity.

Failure Criteria:

- "Timer failed. Please start manually."

User Story 2. View Time Report

- **As an** employee,
- **I want to** view my weekly time report
- **So that** I can track productivity.

Success Criteria:

- Select week → system displays daily hours & project breakdowns.

Failure Criteria:

- Invalid week → "Week range is invalid. Select a valid week."
- Access denied → "You cannot view another user's report."

- Report error → "Failed to generate report. Retry later."

User Story 3. Apply for Leave

- **As an** employee,
- **I want to** apply for leave
- **So that** time is not tracked during my absence.

Success Criteria:

- User selects leave dates → system blocks tracking → confirmation sent.

Failure Criteria:

- Invalid dates → "End date must be after start date."
- Overlapping leave → "You already have leave applied for these dates."
- Permission denied → "You cannot apply leave on behalf of another user."
- Network error → "Failed to apply leave. Retry later."

User Story 4. Offline Time Tracking

- **As a** freelancer,
- **I want** my time to be tracked offline
- **So that** work is tracked even without the internet.

Success Criteria:

- Data stored locally.
- The system syncs automatically when online.

Failure Criteria:

- Storage full → "Cannot save time entry. Clear storage."
- Sync conflict → "Offline log conflicts with online entry."
- Sync failed → "Failed to sync. Retry later."
- Unauthorized → "Offline logging disabled for your account."

User Stories For Project Managers

User Story 1: Assign a Task to a Team Member

- **As a** project manager
- **I want** to assign tasks to specific team members with deadlines
- **So that** work is distributed efficiently and accountability is clear

Acceptance Criteria

- Given a task exists, when I assign it to a member and set a valid deadline, then the system should notify the member and update the task status.
- If the selected user does not exist, show "The selected user does not exist."
- If the deadline is earlier than today, show "The deadline cannot be earlier than today."
- If the task is already assigned, show "This task is already assigned to [User]."
- If I don’t have permission, show "You do not have permission to assign tasks."

User Story 2: Manage Project Expenses Within Budget

- **As a** project manager
- **I want** to review and approve project-related expenses while tracking against the project budget
- **So that** only valid expenses are billed to clients and overall costs stay under control

Success Criteria:

- Manager sets a project budget (with billing rates defined)
- Team members log expenses and hours
- Manager reviews and approves/rejects each expense claim
- System updates budget utilization (hours × rate + expenses)
- Alerts are sent when budget limit is nearing or exceeded

Failure Criteria:

- Invalid budget amount → "Budget must be a positive amount."
- Missing billing rate → "Set billing rate before budget tracking."
- Expense already approved → "Expense already approved."
- Expense not found → "Expense not found."
- Budget exceeded → "Project budget has been exceeded."
- Permission denied → "You cannot modify project budget."

User Story 3. Monitor Real-Time Progress

- **As a** manager,
- **I want** dashboards to track project milestones in real time.

Success Criteria:

- View dashboard → system updates instantly with logged time.

Failure Criteria:

- No projects → "You are not assigned to any projects."
- Timeout → "Failed to load dashboard. Refresh."
- Permission denied → "You do not have access."
- Data inconsistency → "Contact support."

User Story 4: Set a Delay Alert

- **As a** project manager
- **I want** to set alerts for delayed tasks
- **So that** I can proactively address bottlenecks

Acceptance Criteria

- Given a task exists with deadline, when I set an alert, then the system should notify me if the task is delayed.
- If task unassigned, show "Cannot set alert for unassigned task."
- If alert time is after deadline, show "Alert must be before deadline."
- If duplicate alert exists, show "Alert already exists for this task."
- If system is offline, show "Failed to set alert. Retry later."

User Story 5: Generate an Invoice

- **As a** billing staff member
- **I want** to generate invoices from approved time entries
- **So that** clients are billed accurately

Acceptance Criteria

- Given valid project and time entries, when I generate an invoice, then the system should calculate charges and draft the invoice.
- If no entries selected, show "At least one time entry must be selected."
- If billing rate invalid, show "Billing rate must be positive."
- If tax rule invalid, show "Tax rate not applicable for this client."
- If payment method missing, show "Client has no payment method on file."

User Story 6: Approve an Invoice

- **As a** client or project manager
- **I want** to review and approve invoices
- **So that** billing aligns with agreed deliverables

Acceptance Criteria

- Given an invoice exists, when I approve it, then the system should mark it as approved and notify relevant parties.
- If invoice not found, show "Invoice does not exist."
- If invoice contains unverified entries, show "Approve only verified time entries."
- If invoice is already approved, show "Invoice already approved."
- If network error, show "Failed to approve invoice. Retry later."

User Story 7. Provide Feedback on Service

- **As a** client,
- **I want to** provide feedback on service delivery
- **to** improve collaboration.

Success Criteria:

- Submit feedback form → system stores & notifies team.

Failure Criteria:

- Empty form → "Provide rating and comments."
- Duplicate → "Feedback already submitted."
- Invalid rating → "Rating must be between 1–5."
- Network error → "Failed to submit feedback."

User Stories for Developer Team & System Administrator

User Story 1. Configure Role-Based Access

- **As an** admin,
- **I want to** configure role-based permissions
- **to** ensure data security.

Success Criteria:

- Select role → assign permissions → system saves & logs change.

Failure Criteria:

- Invalid role → "Role name cannot contain special characters."
- Permission conflict → "Write cannot exist without reading."
- Database error → "Failed to update permissions."
- Unauthorized → "You cannot modify role permissions."