

Project Specifications Document: ICT Helpdesk System

Project Title: Development or Customization of an ICT Ticketing/Helpdesk System

Objective: To develop or customize a helpdesk/ticketing system that enables logging, tracking, and resolution of ICT-related issues within SWA/UHS/CIUoN

1. Functional Requirements

- User account creation and authentication
 - Admin
 - Staff
 - Interns
- Ticket submission with:
 - Category (e.g., Network, Hardware, Software)
 - Priority level (Low, Medium, High, Urgent)
 - Description and attachments
- Ticket tracking with status updates
 - Open
 - In Progress
 - Resolved
 - Closed
- Assignment of tickets to ICT support personnel
- Internal commenting on tickets
- Email notifications for ticket updates
- Dashboard for ticket overview
- Reports generation:
 - Daily/weekly/monthly activity
 - Response time and resolution metrics

2. Technical Requirements

Option A: Customizing Existing Tools Recommended open-source platforms:

- osTicket (PHP/MySQL)
- Zammad (Ruby on Rails)
- GLPI (PHP/MySQL)
- Faveo (Laravel/PHP)
- UVdesk (Symfony/PHP)

Tasks:

- Installation on local LAMP/LEMP environment
- Configuration of categories, user roles, and permissions
- Branding (logo, color theme)
- Custom field additions where necessary
- Test with sample tickets and feedback

Option B: Developing from Scratch Recommended Tech Stack:

- Frontend: HTML/CSS/JavaScript or React
- Backend: Python (Flask/Django), PHP (Laravel), Node.js
- Database: MySQL or PostgreSQL

Modules:

- Authentication & User Management
- Ticket Management
- Assignment and Tracking System
- Notification System
- Reporting & Analytics

Advanced Features:

- File attachments
- Email to ticket conversion
- Mobile responsive interface

3. Project Milestones

- Day 1–2: Requirements gathering and scope definition
- Day 3–5: Tool selection or development stack proposal
- Week 2: System setup/prototyping
- Week 3: Testing and review
- Week 4: Deployment and documentation

4. Deliverables

- Functional helpdesk system demo or deployment
- Source code and version control (GitHub or other repository)
- System documentation (Admin/User manual)
- Final presentation/demo