



# Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

## Faculty Kit

This faculty kit is modeled after the provided reference and tailored to the project topic: **Web Based Mail Client Model**. The kit outlines evaluation strategies, milestone criteria, and supporting resources.

### Evaluation Strategy/Tips for the different milestones of the project

#### Objective

*This project is about developing a web-based mail client that connects to a Linux server running a mail server, with Tomcat as the web server. The main functionalities are:*

- *Receiving, sending, and organizing mails using POP3*
- *Sending mail using sendmail*
- *Admin functions such as managing new users and resetting passwords*

#### Requirements Specification

- **Requirement Specification**

Evaluation Points:

##### Key Evaluation Points:

- Clarity and completeness of user/system requirements for mail operations and admin functions.
- Reasonableness of assumptions (e.g., user authentication, email storage, device/browser compatibility).
- Evidence that all team members understand the requirements.
- Quality of the SRS (Software Requirements Specification) document: structure, formatting, and detail.

---

- **Technology Familiarization**

Evaluation Points:

- **Frontend:** HTML, CSS, JavaScript
- **Backend:** Java (Servlets/JSP on Tomcat)
- **Mail Protocols:** POP3 (for receiving), sendmail (for sending)
- **Server:** Linux (hosting mail server and Tomcat)
- **Database:** MySQL or another suitable RDBMS (for user/admin data)
- **Justification:** Assess rationale for selecting Java/Tomcat, POP3, and sendmail for the mail client.



# Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

Suggested Activities:

- Team presentation on technologies.
- 

## • Database Creation

Evaluation Parameters:

- Well-designed, normalized schema for user/admin data.
  - Proper use of datatypes, primary/foreign keys, and constraints.
  - Avoidance of redundancy; clear mapping of mail metadata if stored.
  - Backup/recovery strategies and indexing where relevant.
  - Documentation of relationships (e.g., users to mailboxes).
- 

## • High-Level and Detailed Design

Evaluation Points:

- Coverage of all requirements in design documents.
  - Clear breakdown of components: mail client UI, mail handling modules, admin panel, etc.
  - Flowcharts, wireframes, or pseudocode for core modules (mail fetch/send, user management).
  - Considerations for scalability, security (e.g., authentication, data privacy).
- 

## • Front-End Implementation

Evaluation Criteria:

- Clean, accessible, and user-friendly UI using HTML/CSS.
- Responsive design for different devices.
- Intuitive navigation for inbox, sent, compose, and admin sections.
- Use of tooltips, modals, and basic input validation (JavaScript).



## Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

- User Interface: Is the interface intuitive, visually appealing, and user-friendly?
- Help Features: Are instructions available and aligned with the design?
- Error Handling: Are error messages clear, non-technical, and helpful?
- Navigation: Is the layout logical and easy to navigate?

Suggested Activities:

- Evaluate the team's demo of the front-end.
- 

### • Integrating Front-End with Backend and Mail Server

Evaluation Points:

- Correct implementation of mail fetching (POP3) and sending (sendmail).
  - Secure login/logout and session management.
  - Admin functions: new user creation, password reset, user management.
  - Error handling: informative messages for failed mail operations or admin actions.
  - Demonstration of end-to-end mail flow and admin tasks.
- 

### • Final Review

Evaluation Points:

- Completeness and professionalism of the final demo.
- Submission of a detailed project report (with code samples, screenshots, and test cases).
- Discussion of innovations (e.g., spam filtering, advanced search) and proposed future enhancements.
- Assessment of team communication and individual contributions.



## Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

### Documents/References to Aid Evaluation

- HTML/CSS/JS: [w3schools.com](http://w3schools.com)
- Java Servlets/JSP: [Oracle Java EE Documentation](http://Oracle Java EE Documentation)
- POP3/sendmail: [JavaMail API Documentation](http://JavaMail API Documentation)
- MySQL: [mysql.com](http://mysql.com)
- Tomcat: [tomcat.apache.org](http://tomcat.apache.org)

### Sample Quiz/Assessment Topics

- Basics of POP3 and sendmail protocols.
- Java Servlet lifecycle and JSP basics.
- Secure authentication and session management.
- Database schema design for user and mail data.
- Troubleshooting mail server integration on Linux.