

## Stand-Up Meeting Records – Sprint 1

**Project:** Automated Timetable Management System

**Sprint Duration:** Sprint-1

**Objective:** Development of a complete timetable generation backend with frontend integration and role-based access.

### Meeting 1 – Current Update

**Date:** 29-01-2026

**Duration:** 1 hour

**Meeting Conducted By:** Team Lead

#### 1. Roles Discussed

The team reviewed individual module responsibilities.

- Authentication module owner confirmed JWT implementation progress.
- Backend team discussed integration of scheduling engine with API layer.
- Timetable publication responsibilities assigned.

Clear ownership was established for scheduler logic, API routes, and frontend timetable display.

#### 2. Inputs on Epics & User Stories

- Course prerequisite handling logic reviewed.
- Automatic generation of weekly course hours discussed.
- Room and laboratory availability constraints analyzed.
- Faculty assignment workflow evaluated and improvements suggested.
- Timetable publication module implemented and tested locally.

### 3. Inputs on Modules

- Scheduler logic integrated with backend controllers.
- Timetable generation working with sample data.
- Admin module partially functional.

### 4. Inputs on Testing Planned

- Unit testing planned for timetable generation module.
- Validation testing planned for course-hour and slot constraints.
- Conflict detection test scenarios identified.

### 5. Inputs on Reports Planned

- Sprint-1 progress report initiated.
- UML diagram documentation assigned.

### 6. Inputs on Database Aspects

- Course schema and faculty mapping reviewed.
- Relationships between timetable entries and slots validated.

### 7. Functional Requirements Progress

- System generates timetable based on academic calendar.
- Admin configuration modules functioning.

### 8. Non-Functional Requirements

- Performance of scheduler discussed.
- Scalability concerns noted for future improvement.

### 9. High Priority Issues

- Scheduling algorithm needs refinement.
- Faculty preference integration pending.

## Meeting 2 – Project Progression

**Date:** 03-02-2026

**Duration:** 1 hour

### Roles Discussed

Backend integration responsibilities finalized. Testing ownership assigned.

### Epics & User Stories Progress

- Scheduler successfully integrated with backend.
- Unit tests completed for timetable module.
- Some constraint failures identified during testing.
- Faculty timetable access user story implemented.
- Student timetable viewing implemented.

### Module Inputs

- Backend and scheduler fully connected.
- Frontend timetable display integrated with API.

### Testing Planned

- Constraint testing for edge cases.
- Role-based authentication testing.
- End-to-end timetable generation test planned.

### Database Inputs

- Timetable schema validated with sample records.
- Faculty and course relations verified.

### Functional Requirements

- Faculty timetable view operational.
- Student timetable view operational.

## Non-Functional Requirements

- Reliability improvements discussed.
- Error handling enhancements proposed.

## High Priority Issues

- Failed scheduler test cases.
- Need optimization for workload balancing.

## Meeting 3 – Backend Modifications

**Date:** 04-02-2026

**Duration:** 1 hour

### Roles Discussed

Backend module responsibilities reviewed and reassigned where needed.

### Epics & User Stories

- Faculty timetable API completed.
- Infrastructure constraints defined.
- Faculty workload policy discussed.

### Module Inputs

- API endpoints updated.
- Controller logic refactored.
- Database queries optimized.

### Testing Planned

- Postman API testing planned.
- Jest unit testing for controllers.

## Database Inputs

- Workload schema reviewed.
- Leave schema integrated with timetable.

## Functional Requirements

- Faculty timetable viewing enabled.
- Leave application API functional.

## Non-Functional Requirements

- Performance optimization discussed.
- Server load considerations noted.

## High Priority Issues

- Workload calculation needs better distribution logic.

## Meeting 4 – Timetable Optimization

**Date:** 07-02-2026

**Duration:** 1 hour

## Roles Discussed

Scheduler optimization tasks assigned to backend team.

## Epics & User Stories

- Workload distribution analysis performed.
- Faculty workload balancing in progress.

## Module Inputs

- Hard constraints reviewed.
- Some converted into soft constraints.

- Conflict resolution strategy improved.

#### Testing Planned

- Optimization testing with larger dataset.
- Conflict scenario testing.

#### Database Inputs

- Workload rules schema reviewed.

#### Functional Requirements

- Balanced timetable generation targeted.

#### Non-Functional Requirements

- Efficiency improvements discussed.
- Scheduling speed improvements considered.

#### High Priority Issues

- Edge-case conflicts still present.

### Meeting 5 – Faculty Course Selection Updates

**Date:** 07-02-2026

**Duration:** 1 hour

#### Roles Discussed

Faculty module ownership confirmed.

#### Epics & User Stories

- Faculty course preference submission completed.
- Course assignment workflow updated.

- Admin approval flow reviewed.

#### Module Inputs

- Backend logic for course assignment added.
- Preference data stored in database.

#### Testing Planned

- Faculty preference testing.
- Admin approval testing.

#### Database Inputs

- Course-faculty relation verified.

#### Functional Requirements

- Faculty preference submission operational.

#### Non-Functional Requirements

- Data consistency ensured.

#### High Priority Issues

- UI validation required for approval workflow.

### Meeting 6 – Authentication & Student Module Updates

**Date:** 08-02-2026

**Duration:** 1 hour

#### Roles Discussed

Authentication and student module tasks reviewed.

## Epics & User Stories

- Student timetable view completed.
- Login authentication tested.

## Module Inputs

- JWT authentication integrated.
- Student dashboard connected to backend.

## Testing Planned

- Login validation testing.
- Role-based access testing.

## Database Inputs

- User schema validated.

## Functional Requirements

- Student timetable display functional.

## Non-Functional Requirements

- Security validation discussed.

## High Priority Issues

- None critical.

## Meeting 7 – Weekly Project Update

**Date:** 08-02-2026

**Duration:** 1.5 hours



## Roles Discussed

All module owners presented progress.

## Epics & User Stories

- Backend modules completed.
- Frontend dashboards integrated.
- Timetable generation functional.

## Module Inputs

- Full system integration achieved.
- End-to-end workflow tested locally.

## Testing Planned

- Full API testing.
- Integration testing.

## Database Inputs

- Final schema validation completed.

## Functional Requirements

- Core system operational locally.

## Non-Functional Requirements

- Deployment planning started.

## High Priority Issues

- Dynamic leave rescheduling pending.
- Workload dashboard pending.
- Deployment pending.

## Overall Sprint-1 Summary

### Completed

- Backend architecture
- Frontend dashboards
- Timetable generation
- Role-based authentication
- Basic leave system
- Database schema
- UML diagrams

### Pending for Sprint-2

- Advanced workload optimization
- Dynamic leave-based rescheduling
- Deployment
- API testing
- Analytics dashboard