

## MERN Stack Training

**Company:** Sensation Software Solutions

**Student Name:** Gurvinder Singh

**Training Duration:** 6 Months

**Days:** 58

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## Objective of the Day

The objective of Day 58 was to understand **backend testing cycles**, error handling, and integration with frontend applications.

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## Work Done on Day 58

The trainer explained **testing methodologies** for backend development and how proper feedback improves application robustness.

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## Backend Testing and Feedback

Topics included:

- **Bug Reporting:** Logging API failures with detailed messages
  - **Issue Tracking:** Using tools like Jira for backend issues
  - **Automated Testing:** Writing unit tests for controllers and routes using Jest/Mocha
  - **Regression Testing:** Ensuring new backend changes do not break existing APIs
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## Hands-on Practice

- Tested API endpoints with Postman
  - Implemented error handling middleware in Express
  - Fixed backend bugs based on test results
  - Retested to verify successful fixes
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## Conclusion

Day 58 strengthened knowledge of **backend quality assurance processes**, ensuring stable, secure, and efficient server-side applications.