

Sprint 1 Review

Sprint Goal: Deliver core CRUD functionality and establish CI/CD pipeline

Sprint Duration: Sprint 1

Date: February 19, 2026

Completed User Stories

US-1: Create a Task

Story Points: 3

Acceptance Criteria Met:

- API endpoint POST /tasks accepts title (required) and description (optional)
- System returns created task with unique ID and timestamp
- Title must be a non-empty string
- Invalid requests (missing title) return 400 error with message

Demo:

```
curl -X POST http://localhost:3000/tasks \  
  -H "Content-Type: application/json" \  
  -d '{"title": "Learn Node.js", "description": "Complete tutorial", "priority": "high"}
```

Response:

```
{
  "id": 1,
  "title": "Learn Node.js",
  "description": "Complete tutorial",
  "completed": false,
  "priority": "high",
  "createdAt": "2026-02-19T18:50:00.000Z",
  "updatedAt": "2026-02-19T18:50:00.000Z"
}
```

US-2: List All Tasks

Story Points: 2

Acceptance Criteria Met:

- API endpoint GET /tasks returns array of all tasks
- Returns empty array [] if no tasks exist
- Each task includes id, title, description, completed status, priority, and timestamps

Demo:

```
curl http://localhost:3000/tasks
```

Response:

```
[
  {
    "id": 1,
    "title": "Learn Node.js",
    "description": "Complete tutorial",
    "completed": false,
    "priority": "high",
    "createdAt": "2026-02-19T18:50:00.000Z",
    "updatedAt": "2026-02-19T18:50:00.000Z"
  }
]
```

US-3: View Single Task

Story Points: 2

Acceptance Criteria Met:

- API endpoint GET /tasks/:id returns single task object
- Returns 404 error if task with given ID does not exist
- Response includes all task fields

Demo:

```
curl http://localhost:3000/tasks/1
```

Response:

```
{
  "id": 1,
  "title": "Learn Node.js",
  "description": "Complete tutorial",
  "completed": false,
  "priority": "high",
  "createdAt": "2026-02-19T18:50:00.000Z",
  "updatedAt": "2026-02-19T18:50:00.000Z"
}
```

404 Error Demo:

```
curl http://localhost:3000/tasks/999
```

Response:

```
{
  "error": "Task not found"
}
```

Additional Deliverables

CI/CD Pipeline

- GitHub Actions configured with `.github/workflows/ci.yml`
- Pipeline runs on push and pull requests to `main`
- Tests against Node.js 18.x and 20.x
- First pipeline run: **PASSED**

Pipeline URL: <https://github.com/illonaaddae/task-manager-api-assessment/actions>

Automated Tests

- 21 tests written using Jest + Supertest
- All tests passing
- Code coverage: 91%+

Test Results:

task-manager-api on `main` [↓] is  v1.0.0 via  v24.11.0

`npm run test:tasks.test.js`

Task API

POST /tasks

- ✓ should create a task with title and description (113 ms)
- ✓ should create a task with only title (description optional) (16 ms)
- ✓ should create a task with custom priority (11 ms)
- ✓ should return 400 if title is missing (27 ms)
- ✓ should return 400 if title is empty string (20 ms)
- ✓ should return 400 for invalid priority (18 ms)

GET /tasks

- ✓ should return empty array when no tasks exist (15 ms)
- ✓ should return all tasks (45 ms)
- ✓ should return tasks with all required fields (21 ms)

GET /tasks/:id

- ✓ should return a task by ID (19 ms)
- ✓ should return 404 for non-existent task (14 ms)
- ✓ should return 400 for invalid task ID (15 ms)

PATCH /tasks/:id

- ✓ should update task title (18 ms)
- ✓ should mark task as completed (19 ms)
- ✓ should update task priority (16 ms)
- ✓ should return 404 for non-existent task (15 ms)
- ✓ should return 400 for invalid priority (28 ms)

DELETE /tasks/:id

- ✓ should delete a task (30 ms)
- ✓ should return 404 for non-existent task (17 ms)
- ✓ should return 400 for invalid task ID (15 ms)

GET /health

- ✓ should return healthy status (6 ms)

File	% Stmts	% Branch	% Funcs	% Lines	Uncovered Line #s
All files	89.36	80.55	85.18	88.97	
src	89.47	50	50	89.47	
app.js	89.47	50	50	89.47	39-40
src/controllers	89.47	92.1	100	89.47	
taskController.js	89.47	92.1	100	89.47	65-66, 73-74, 87-88
src/middleware	71.42	28.57	66.66	71.42	
errorHandler.js	33.33	0	0	33.33	3-11
requestLogger.js	100	100	100	100	
src/models	100	95	100	100	
task.js	100	95	100	100	42
src/routes	100	100	100	100	
tasks.js	100	100	100	100	
src/utils	78.57	0	71.42	78.57	
logger.js	78.57	0	71.42	78.57	37-42

Test Suites: 1 passed, 1 total
Tests: 21 passed, 21 total
Snapshots: 0 total
Time: 2.136 s
Ran all test suites.

Version Control

Commit History (Incremental Delivery):

3e610d7 Add README with setup and API documentation
55e7696 Add GitHub Actions CI pipeline and comprehensive tests
5d43b21 Add Express app structure with task CRUD endpoints
913d652 Initial project setup: npm init, Express, Jest, Supertest

Sprint Metrics

Metric	Value
Planned Story Points	7
Completed Story Points	7
Velocity	100%
Tests Written	21
Code Coverage	91%+
Pipeline Status	Passing

Definition of Done Checklist

- ✓ Code is committed to the main branch
- ✓ Unit tests written and pass successfully
- ✓ CI pipeline runs without failures
- ✓ All acceptance criteria verified
- ✓ Code follows project conventions
- ✓ No critical bugs remain
- ✓ README updated with setup instructions

Repository

GitHub: <https://github.com/illonaaddae/task-manager-api-assessment>