

# Adaptive Learning System

Dec 3, 2025

<http://>

Project manager

Project dates

Nov 7, 2025 - Apr 23, 2026

Completion

0%

Tasks

77

Resources

0

Tasks

2

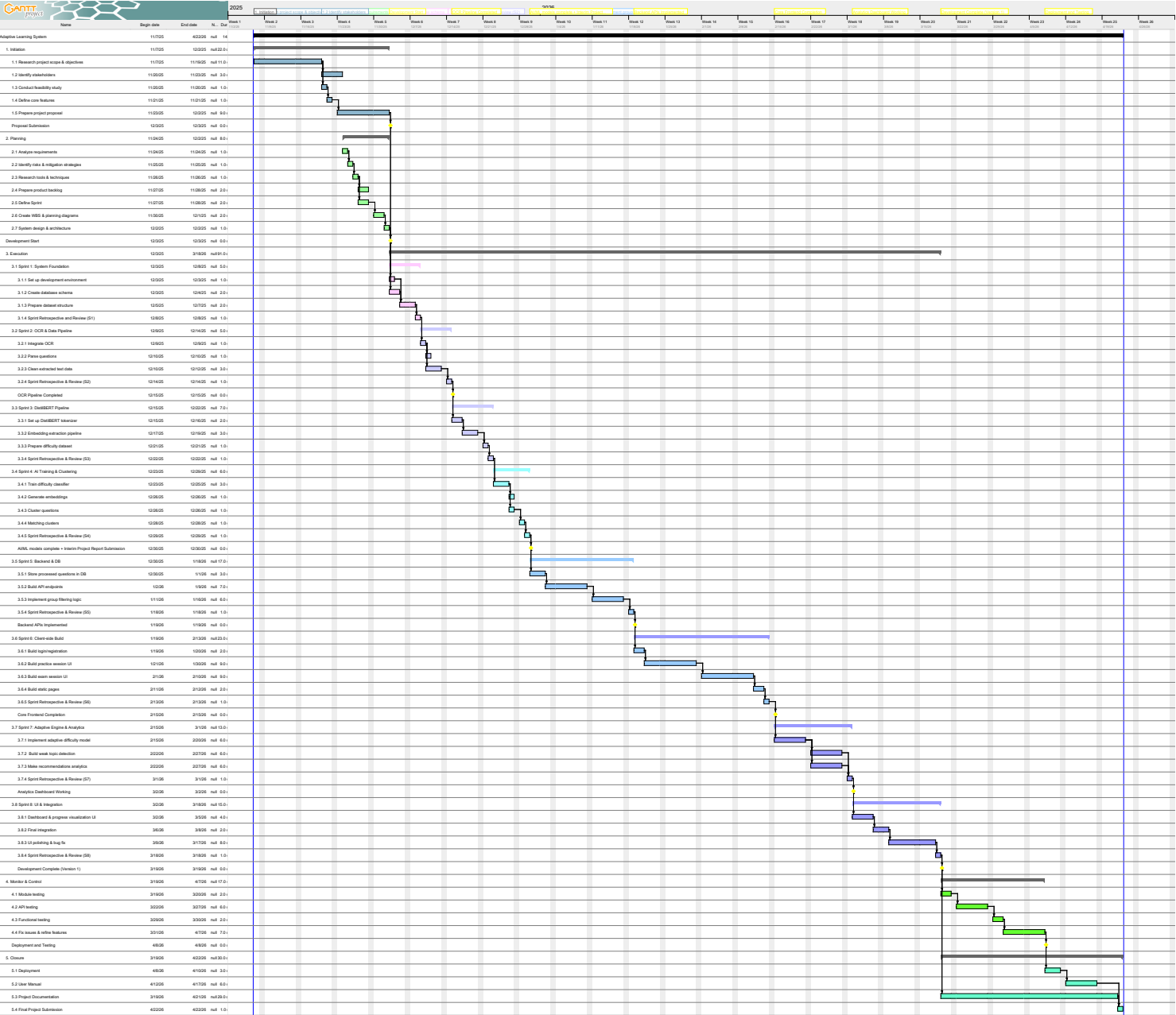
Name	Begin date	End date	Notes	Duration
Adaptive Learning System	11/7/25	4/22/26		143
1. Initiation	11/7/25	12/2/25		22
1.1 Research project scope & objectives	11/7/25	11/19/25		11
1.2 Identify stakeholders	11/20/25	11/23/25		3
1.3 Conduct feasibility study	11/20/25	11/20/25		1
1.4 Define core features	11/21/25	11/21/25		1
1.5 Prepare project proposal	11/23/25	12/2/25		9
Proposal Submission	12/3/25	12/3/25		0
2. Planning	11/24/25	12/2/25		8
2.1 Analyze requirements	11/24/25	11/24/25		1
2.2 Identify risks & mitigation strategies	11/25/25	11/25/25		1
2.3 Research tools & techniques	11/26/25	11/26/25		1
2.4 Prepare product backlog	11/27/25	11/28/25		2
2.5 Define Sprint	11/27/25	11/28/25		2
2.6 Create WBS & planning diagrams	11/30/25	12/1/25		2
2.7 System design & architecture	12/2/25	12/2/25		1
Development Start	12/3/25	12/3/25		0
3. Execution	12/3/25	3/18/26		91
3.1 Sprint 1: System Foundation	12/3/25	12/8/25		5
3.1.1 Set up development environment	12/3/25	12/3/25		1
3.1.2 Create database schema	12/3/25	12/4/25		2
3.1.3 Prepare dataset structure	12/5/25	12/7/25		2
3.1.4 Sprint Retrospective and Review (S1)	12/8/25	12/8/25		1
3.2 Sprint 2: OCR & Data Pipeline	12/9/25	12/14/25		5
3.2.1 Integrate OCR	12/9/25	12/9/25		1
3.2.2 Parse questions	12/10/25	12/10/25		1
3.2.3 Clean extracted text data	12/10/25	12/12/25		3
3.2.4 Sprint Retrospective & Review (S2)	12/14/25	12/14/25		1
OCR Pipeline Completed	12/15/25	12/15/25		0

Tasks

Name	Begin date	End date	Notes	Duration
3.3 Sprint 3: DistilBERT Pipeline	12/15/25	12/22/25		7
3.3.1 Set up DistilBERT tokenizer	12/15/25	12/16/25		2
3.3.2 Embedding extraction pipeline	12/17/25	12/19/25		3
3.3.3 Prepare difficulty dataset	12/21/25	12/21/25		1
3.3.4 Sprint Retrospective & Review (S3)	12/22/25	12/22/25		1
3.4 Sprint 4: AI Training & Clustering	12/23/25	12/29/25		6
3.4.1 Train difficulty classifier	12/23/25	12/25/25		3
3.4.2 Generate embeddings	12/26/25	12/26/25		1
3.4.3 Cluster questions	12/26/25	12/26/25		1
3.4.4 Matching clusters	12/28/25	12/28/25		1
3.4.5 Sprint Retrospective & Review (S4)	12/29/25	12/29/25		1
AI/ML models complete + Interim Project Report Submission	12/30/25	12/30/25		0
3.5 Sprint 5: Backend & DB	12/30/25	1/18/26		17
3.5.1 Store processed questions in DB	12/30/25	1/1/26		3
3.5.2 Build API endpoints	1/2/26	1/9/26		7
3.5.3 Implement group filtering logic	1/11/26	1/16/26		6
3.5.4 Sprint Retrospective & Review (S5)	1/18/26	1/18/26		1
Backend APIs Implemented	1/19/26	1/19/26		0
3.6 Sprint 6: Client-side Build	1/19/26	2/13/26		23
3.6.1 Build login/registration	1/19/26	1/20/26		2
3.6.2 Build practice session UI	1/21/26	1/30/26		9
3.6.3 Build exam session UI	2/1/26	2/10/26		9
3.6.4 Build static pages	2/11/26	2/12/26		2
3.6.5 Sprint Retrospective & Review (S6)	2/13/26	2/13/26		1
Core Frontend Completion	2/15/26	2/15/26		0
3.7 Sprint 7: Adaptive Engine & Analytics	2/15/26	3/1/26		13
3.7.1 Implement adaptive difficulty model	2/15/26	2/20/26		6

Name	Begin date	End date	Notes	Duration
3.7.2 Build weak topic detection	2/22/26	2/27/26		6
3.7.3 Make recommendations analytics	2/22/26	2/27/26		6
3.7.4 Sprint Retrospective & Review (S7)	3/1/26	3/1/26		1
Analytics Dashboard Working	3/2/26	3/2/26		0
3.8 Sprint 8: UI & Integration	3/2/26	3/18/26		15
3.8.1 Dashboard & progress visualization UI	3/2/26	3/5/26		4
3.8.2 Final integration	3/6/26	3/8/26		2
3.8.3 UI polishing & bug fix	3/9/26	3/17/26		8
3.8.4 Sprint Retrospective & Review (S8)	3/18/26	3/18/26		1
Development Complete (Version 1)	3/19/26	3/19/26		0
4. Monitor & Control	3/19/26	4/7/26		17
4.1 Module testing	3/19/26	3/20/26		2
4.2 API testing	3/22/26	3/27/26		6
4.3 Functional testing	3/29/26	3/30/26		2
4.4 Fix issues & refine features	3/31/26	4/7/26		7
Deployment and Testing	4/8/26	4/8/26		0
5. Closure	3/19/26	4/22/26		30
5.1 Deployment	4/8/26	4/10/26		3
5.2 User Manual	4/12/26	4/17/26		6
5.3 Project Documentation	3/19/26	4/21/26		29
5.4 Final Project Submission	4/22/26	4/22/26		1

Gantt Chart



# Adaptive Learning System

## Resources Chart

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