Department of Computer Science - UBIT

Document: Work Breakdown Structure (WBS)

Project Title: Inquizitive Application

Team: CerebroSparks

Course Title:
Software Project Management (CS-458)

Class/Section:
BSCS – 4th Semester, Section B

Submitted by:

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Under the Supervision of:

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Work Breakdown Structure (WBS) Template

WBS Code	Task Name	Description	Responsible Person	Start Date	End Date	Duration	Predec-essors
1.0	Project Initiation	Initial phase to define objectives and identify stakeholders	CerebroSparks	17-Jul-2025	19-Jul-2025	3 days	-
1.1	Define Project Objectives	Set clear goals for AI-powered quiz app	CerebroSparks	17-Jul-2025	18-Jul-2025	2 days	-
1.2	Identify and confirm stakeholders	Identify key users (teachers, admins)	Wajeeha Batool	19-Jul-2025	19-Jul-2025	1 days	1.1
2.0	Requirements Gathering	Gather and finalize software requirements	CerebroSparks	20-Jul-2025	26-Jul-2025	1 week	-
2.1	Conduct Requirement Sessions with Teachers	Capture quiz needs, formats, challenges	CerebroSparks	20-Jul-2025	23-Aug-2025	4 days	1.2
2.2	Document Functional and Non-Functional	Include AI quiz creation, grading,	CerebroSparks	24-Aug-2025	26-Aug-2025	3 days	2.1

		Requirements	integrity features					
3.0	Design	UI/UX and system design planning	Usaid Ahmed	27-Jul-2025	5-Aug-2025	10 days	-
3.1	Frontend Wireframes	Design quiz and student interface, teacher dashboard views	Usaid Ahmed	27-Jul-2025	3-Aug-2025	8 days	2.2
3.2	Review and Finalize Designs with Stakeholders	Get feedback from teachers and admins	CerebroSparks	4-Aug-2025	6-Aug-2025	3 days	3.1
4.0	Development	Full system coding and AI integration	CerebroSparks	7-Aug-2025	20-Sep-2025	45 days	-
4.1	Database Design	Design schema for quizzes, users, classes	Shahana, Wajeeha, Usaid	7-Aug-2025	12-Aug-2025	6 days	4.0
4.2	Database connectivity	Set up database connection for backend	Shahana, Anabiyah, Fareeha	13-Aug-2025	16-Aug-2025	4 days	4.1
4.3	Backend coding	Implement logic (user authentication, quiz logic, performance tracking)	Anabiyah, Wajeeha, Fareeha	17-Aug-2025	27-Sep-2025	11 days	4.2

4.4	API creation	Build APIs for login, quizzes, class mgmt, reports	Anabiyah, Shahana, Wajeeha, Fareeha	28-Aug-2025	04-Sep-2025	8 days	4.3
4.5	API integration	Ensure APIs work with AI module and database	Anabiyah, Shahana	05-Sep-2025	09-Sep-2025	5 days	4.4
4.6	Frontend integration with backend	Connect frontend UI to backend APIs, finalize data flow	Usaid, Wajeeha, Fareeha	10-Sep-2025	20-Sep-2025	11 days	4.5
5.0	Testing	QA testing, bug fixes, and UAT	Fareeha Jawed	21-Sep-2025	10-Oct-2025	20 days	-
5.1	Unit Testing of Individual Components	Test APIs, UI components, AI module	Fareeha, Wajeeha, Anabiyah	21-Sep-2025	28-Sep-2025	8 days	4.6
5.2	Integration Testing Across Modules	Check interactions between backend, frontend, AI	Shahana, Usaid	29-Sep-2025	05-Oct-2025	7 days	5.1
5.3	User Acceptance Testing (UAT) with Teachers	Teachers test app and provide feedback	CerebroSparks	06-Oct-2025	10-Oct-2025	5 days	5.2
6.0	Deployment	App release to production environment	CerebroSparks	11-Oct-2025	15-Oct-2025	5 days	-

6.1	Set Up Hosting on Web Server	Configure production environment	Usaid, Wajeeha	11-Oct-2025	13-Oct-2025	3 days	5.3
6.2	Deploy Final Web Application	Final deployment with monitoring setup	Usaid, Shahana	14-Oct-2025	15-Oct-2025	2 days	6.1
7.0	Project Closure	Final delivery, documentation, demo	CerebroSparks	16-Oct-2025	20-Oct-2025	5 days	-
7.1	Prepare User Manual and Documentation	Manuals for teachers/admins, dev docs	CerebroSparks	16-Oct-2025	17-Oct-2025	2 days	6.2
7.2	Final Walkthrough/Demo for Sponsor	Present app to sponsor, gather approval	CerebroSparks	18-Oct-2025	20-Oct-2025	3 days	6.1