# **Product Requirements Document (PRD)**

**Project Title:** Didaktos: Your Clear Learning Path with Enhanced UX and Productivity Chatbot

## **1. Introduction / Overview**

This project is a simplified clone of Instructure’s Canvas LMS, redesigned with a modern, clean dashboard and an integrated chatbot productivity coach. The application enables instructors to manage courses, create assignments, and grade students, while students can view materials, submit work, and track progress. The chatbot acts as a task-planning assistant, helping students organize study sessions and stay on top of deadlines.

**MVP Focus:** Student-first experience with a scripted chatbot widget, web application only, with clean, fluid UX.

## **2. Goals / Objectives**

1. Build a functional full-stack LMS MVP with CRUD operations for courses, assignments, and grades.
2. Improve UX with a streamlined, modern dashboard prioritizing navigation and task tracking.
3. Implement secure authentication and role-based access (student vs instructor).
4. Prototype a chatbot widget that helps students plan tasks and study sessions.
5. Deliver a portfolio-ready project demonstrating React, ASP.NET Core, and SQL integration.

## **3. Target Audience / User Personas**

**Student Persona**

1. Age: Any.
2. Pain Points: Difficult navigation, unclear submission process, tracking grades is cumbersome.
3. Goals: Quick access to courses, view assignments/deadlines, submit work, track progress.

**Instructor Persona**

1. Needs: Intuitive app to create/manage courses, assignments, grade submissions with optional comments, approve/remove students
2. Goals: Efficiently manage courses and assignments without analytics/reporting in MVP

## **4. User Stories / Use Cases**

**Student User Stories**

1. Log in securely to access courses.
2. View all courses on a clean dashboard.
3. View upcoming assignments and deadlines.
4. Submit assignments online.
5. View grades and feedback.
6. Use chatbot widget for planning study sessions.

**Instructor User Stories**

1. Log in securely.
2. Create and update courses.
3. Approve or remove students from courses.
4. Create, edit, delete assignments.
5. View student submissions.
6. Assign grades with optional comments.

## **5. Functional Requirements (MVP)**

**Authentication & Authorization**

1. Secure registration/login
2. Role-based access (student vs instructor)

**Student Functions**

1. Dashboard view of enrolled courses
2. View assignments and deadlines
3. Submit assignments (file/text)
4. View grades and feedback
5. Chatbot widget for study session planning

**Instructor Functions**

1. Create/update courses
2. Approve/remove students
3. Create/edit/delete assignments
4. View student submissions
5. Assign grades with optional comments

**System & Dashboard**

1. Clean, intuitive navigation
2. CRUD support for courses, assignments, submissions, and grades

## **6. Non-Functional Requirements**

**Performance**

1. Fluid, responsive navigation with minimal delays

**Security**

1. Standard authentication with role-based access
2. No additional security compliance constraints

**Usability**

1. Mobile-first design, intuitive interface
2. Clear forms, labels, and touch-friendly buttons

**Maintainability & Scalability**

1. Simple CRUD architecture sufficient for MVP
2. No advanced scaling or analytics required

## **7. Design Considerations / Mockups**

**Dashboard Layout**

1. Clean, minimal interface for quick access to courses, assignments, grades

**Navigation**

1. Mobile-first, responsive with hamburger menu
2. Consistent header/footer

**Chatbot Widget**

1. Popup accessible from dashboard
2. Scripted reminders and study planning

**Forms & Data Entry**

1. Intuitive forms for assignment submission, course creation, grading
2. Clear labels, inline validation, mobile-friendly

**Visual Style & Branding**

1. Modern, minimal aesthetic with soft color palette
2. Use of icons for key actions (submit, grade, enroll)

**Accessibility & Responsiveness**

1. Legible fonts, adequate contrast, touch-friendly
2. Layout adapts fluidly across devices

## **8. Success Metrics**

**Student Engagement**

1. **Assignment submission rate:** Percentage of assignments submitted on time.
2. **Chatbot usage:** Number of interactions per active student.
3. **Dashboard navigation:** Average time to find and access courses/assignments.

**Instructor Efficiency**

1. **Course/assignment creation:** Average time to create a course or assignment.
2. **Grading:** Average time to grade submissions.

**UX & Adoption**

1. **User satisfaction:** Survey or feedback rating from students and instructors.
2. **Performance:** Dashboard load time and responsiveness; fluid navigation maintained.

## **9. Open Questions / Future Considerations**

1. Upgrade chatbot to AI-driven assistant
2. Analytics/reporting for instructors
3. Notifications beyond in-app reminders (email/push)
4. Accessibility compliance (WCAG) or internationalization
5. Scaling for larger user base or additional modules