

Technology Stack Design Specification [20 Marks]

Description	Marks
A technology stack (tech stack) is a combination of programming languages, frameworks, libraries, databases, cloud services, and development tools used to build a software application, it represents a list of all the technology services used to build and run an application.	
<ul style="list-style-type: none"> • Choice of Technology Stack: Choose from the list of well-known full-stack combinations used in software engineering. Justify the choice made. 	[5]
<ul style="list-style-type: none"> • Front-End Technology Stack: Provide a detailed outline of the technologies and tools you plan to use for developing the front-end of the CampusLearn™ platform. Clearly describe your chosen front-end frameworks or libraries explain your UI design approach and outline how the front-end will integrate with APIs or Copilot features. Provide justification for all chosen technologies. 	[5]
<ul style="list-style-type: none"> • Back-End Technology Stack: Explain the programming language(s) and backend frameworks used, describe the API, and outline the authentication and authorization mechanisms. Justify how your choices support scalability and performance. 	[5]
<ul style="list-style-type: none"> • AI-Assistive Tools & Integration: Explain the technology stack of the AI-Powered Tutor Assistant Chatbot with Microsoft Copilot into your system. 	[5]

Marking Rubric:

Excellent	5
Good	4
Average	3
Below Average	2
Poor	1
No submission	0

Additional Information

- This is a Group Project
- 5 Students per group
- Belgium Campus consists of software that can scan for plagiarism and a student caught doing this will get 0 marks for this assignment.
- Late assignments will not be accepted; missing the deadline is an automatic 0.