



Daffodil International University

Department of Information Technology & Management

Faculty of Science & Information Technology

Mid Examination, Fall 2024

Course Code: ITM 123 ; Course Title: Software Requirement Analysis

Sections & Teachers: A, NJ

Time: 1:30 Hrs

Marks: 25

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]

Daffodil University is planning to develop a Bus Management App aimed at enhancing the transportation services for its students and staff. This comprehensive app is envisioned to encompass multiple features. Firstly, it will include user profiles and authentication, allowing users to create profiles with their details and securely log in, possibly using university credentials. A crucial aspect of the app is the management of bus schedules and routes; it will display daily bus schedules and interactive maps of routes, with filtering options for convenience. Additionally, a seat booking system will enable users to book seats, view real-time seat availability, and handle cancellations or rescheduling. One of the standout features is real-time bus tracking, offering live updates and ETAs for buses on various routes. The app will also incorporate a feedback and support system, allowing users to share their travel experiences and access support for queries or complaints. Notifications and alerts will keep users informed about their bookings, schedule changes, or emergencies. To cater to a diverse user base, the app will include accessibility features like text-to-speech and multi-language support. From a management perspective, the app will handle data management and reporting, providing valuable insights into usage patterns and operational efficiency. Integration with existing university systems is planned to ensure a seamless user experience and data consistency. User interface and experience are also key, with an emphasis on an easy-to-navigate, intuitive design. Lastly, the app will address safety concerns by including emergency contact features and safety guidelines, ensuring a comprehensive, user-friendly, and efficient transportation management solution for the university community.

1	a)	Define SDLC? List some SDLC models.	[Marks-3]	CLO-51 Level-2
	b)	Which model you prefer to solve the above project and why? Justify your answer	[Marks-3]	
	c)	Differentiate between Scrum and Kanban with example.	[Marks-3]	
2.	a)	What is Requirement Engineering? How you apply requirement engineering process in above system	[Marks-3]	CLO-3 Level-4
	b)	Define at least 5 functional and nonfunctional requirements.	[Marks-4]	
3	a)	Which elicitation techniques do you implement to collect requirements from students and explain how?	[Marks-4]	CLO-2 Level-4
4	a)	Create a user profile for students	[Marks-5]	CLO-4 Level-3