

# Exam Preparation

## Bike-O Project BRD and Theoretical Exam

SoftUni Team  
Technical Trainers



**SoftUni**



Software University

<https://about.softuni.bg>

1. Project Deliverables
2. IT BA Process Review
3. Bike-O Diagrams Hints and Examples
4. Interview with Bike-O
  - Question Examples
  - 30-min Q&A Sessions
5. Exam Preparation
  - Question Examples



# Have a Question?



sli.do

#IT-BA



# **Exam Preparation**

Bike-O Project BRD and Theoretical Exam

## Theoretical Part

- Multiple Choice Question (MCQ) test of 20 questions covering the material covered in all lectures
- **Dates: 14/10/2023 08:00 – 15/10/2023 23:30**

## Practical Part

- BRD based on the Case Study
- **Deadline: 15/10/2023 23:59**

# Project Deliverables (1)

1. Content (relevant issues set out and the purpose of the analysis explained to an appropriate depth)	
Project Details, Executive Summary and Project Overview <ul style="list-style-type: none"><li><input type="checkbox"/> Accurate description and details</li></ul>	5
Business Process Flow <ul style="list-style-type: none"><li><input type="checkbox"/> Correct BPMN diagram identifying the business processes before and after the changes with relevant entities correctly illustrated</li></ul>	25
Use Cases <ul style="list-style-type: none"><li><input type="checkbox"/> 1 correct Use Case diagram with "Uses" and/or "Extends" relationships between Use Cases that covers the main Features and functionality</li><li><input type="checkbox"/> 3 corresponding Use Case textual descriptions that include all the main components described</li></ul>	25

# Project Deliverables (2)

Requirements <ul style="list-style-type: none"><li><input type="checkbox"/> Correct format of the requirements description</li><li><input type="checkbox"/> Accurate prioritisation</li><li><input type="checkbox"/> Correct identification of requirements type</li></ul>	15
User Stories and Acceptance Criteria <ul style="list-style-type: none"><li><input type="checkbox"/> 3 User Stories with Acceptance Criteria that cover the main Features and functionality</li><li><input type="checkbox"/> Acceptance Criteria corresponds to the User Story and covers scenarios</li><li><input type="checkbox"/> Correct Structure</li></ul>	20
<b>2. Structure (a clear and logical flow of language, easy to follow and each section relates to an overall purpose)</b>	
	10

# Why do we need IT BA?



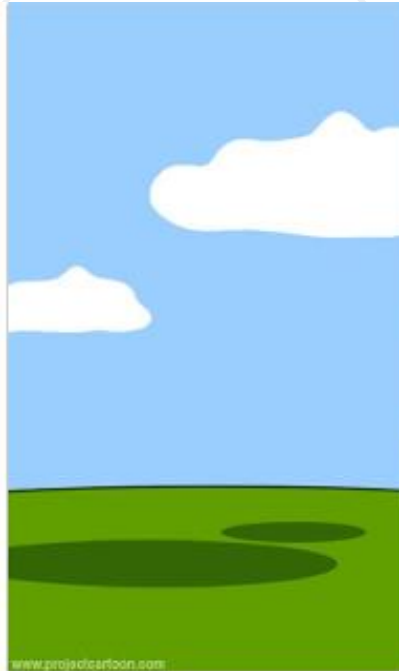
How the customer explained it



How the project leader understood it



How the programmer wrote it



How the project was documented



How the customer was billed



What the customer really needed



# IT BA Process Steps



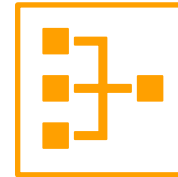
**Identify Problem and  
Gaps**



**Identify Stakeholders**



**Elicit and Analyse  
Requirements**



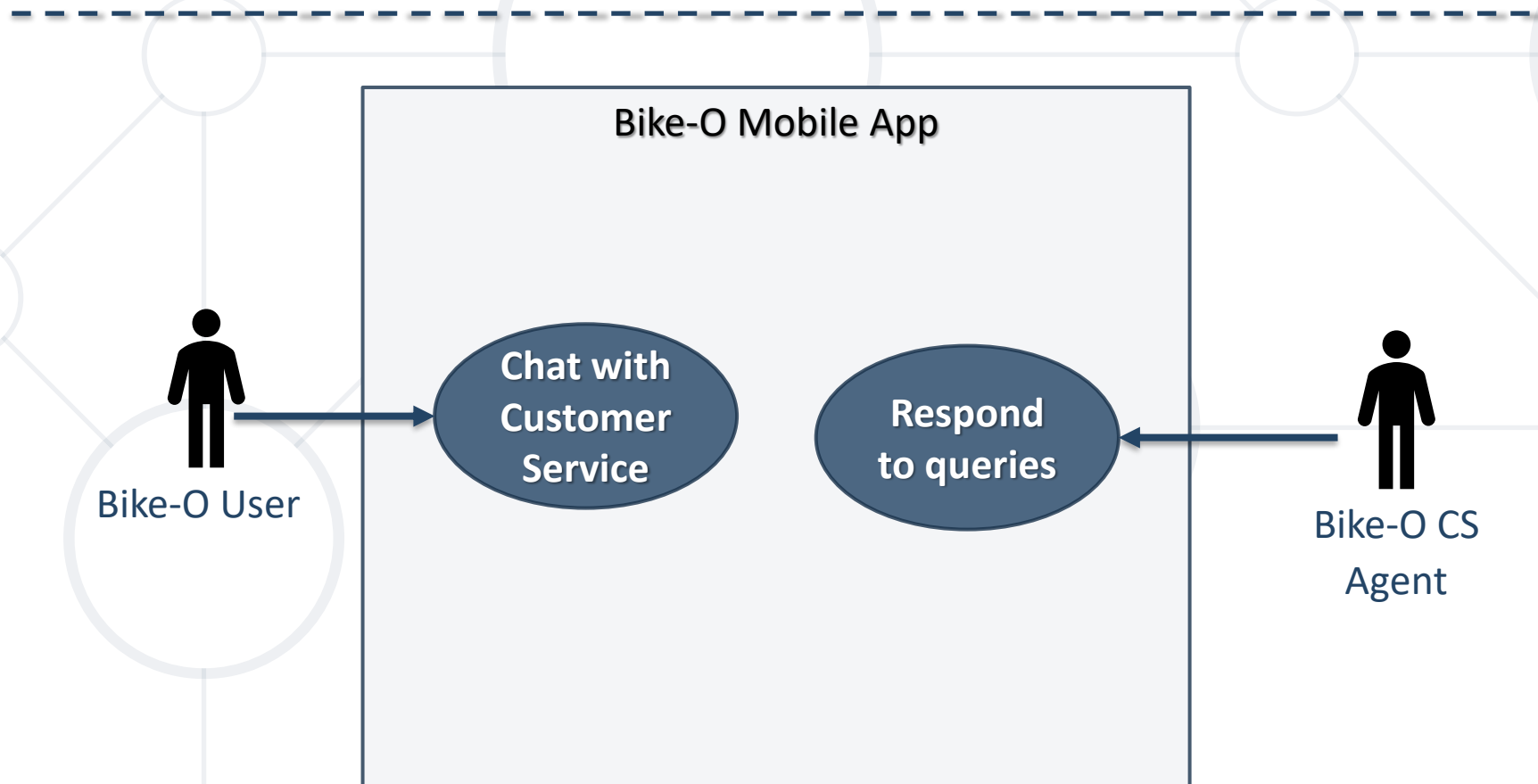
**Design new  
Business/System  
model**



**Plan and Document**

# Use Case for Bike-O Example (1)

## *Ability to...Chat with Customer Service*



## Description

This use case describes the interaction between a user (customer) of the Bike-O mobile app and a customer service agent through the chat feature within the app.

## Goal in context

To enable users to seek assistance, information, or support from the customer service team conveniently within the app.

# Use Case for Bike-O Example (2)

## Actors

- User
- Bike-O CS Agent (Secondary Actor)

## Preconditions

- The user must have the Bike-O mobile app installed and be logged in.
- The user must have an active internet connection.

# Use Case for Bike-O Example (3)

## Main Scenario

1. The user initiates the chat with customer service by selecting the "Chat with Customer Service" option within the mobile app's menu or interface.
2. The app opens a chat interface, displaying previous chat history (if any) and a text input field for the user to type messages.
3. The user composes and sends a message outlining their query, concern, or request for assistance.
4. A customer service agent receives the user's message on their end.
5. The agent composes and sends a response, providing assistance, information, or addressing the user's query.
6. The user and customer service agent engage in a real-time chat conversation, exchanging messages as needed to resolve the user's issue or provide support.
7. The user may have the option to send and receive attachments, such as images, documents, or screenshots, to further clarify the issue or request.
8. The chat session continues until the user's query is resolved or until both parties consider the issue resolved.

# Use Case for Bike-O Hints

- Use ***Ability to*** for recognizing the Use Cases
- Focus mainly on the new Bike-O's Mobile App/System and how the entities interact with it
- Use your External Stakeholders list and pick the ones that are part of the main Use Cases
- Remember to include Actor for Database which is external system (e.g., Salesforce CRM)



Customer

Bike-O

- CS team
- Docking Stations (not necessary)
- Mobile App

# BPMN for Bike-O Hints (1)

- Use Excel sheet or Word document and map out the whole As Is process step by step
- Then add additional bullet points with the changes to the specific steps/stages for the To Be process
- Don't go into much details, just make sure all the main scenarios are covered
- Try to follow linear progress of the steps





# BPMN for Bike-O Hints (2)

- The main process flow we need to illustrate is Renting the bike (Start) and Ending the rent (End)
  - If the CS communication is included in your Scope, it should be included within the BPMN
  - Navigation using the interactive map should be included
  - Choosing Payment options
- Don't forget Database/Data Storage for customer data or rents data!



# What is missing from the Case Study?



- Clarify requirements
  - Priorities
- Missing information
  - Current process
  - Future process
- Vision and Scope
- Deliverables

- How would you describe the whole process with the new Application – from the start to the final from customer perspective? Please describe it shortly in a step-by-step basis.
- What other constraints might you think about, which may affect the successful implementation of the project? Please share all your thoughts from any perspective.
- What is the long term vision of the project and do you have anything else that you want to be included in future stages that is not mentioned in the Case Study?

- Would you like to have a booking feature?
- Do you envision emit invoices, after payments?
- Could you please explain a bit more regarding the gamification part?
- How fast do you want the app to load the main page and individual menus?
- Do you envision a chatbots for customer service to answer before turning to a real person, and if it so, how many queries do you want?

# Interview with the client

- Imagine you have scheduled interview with the client
- We already have sort of documentation but need clarification
- Be open
- **There are no stupid questions**



# slideo

# The floor is yours



# Theoretical Exam





- IT BA Processes
  - Steps and Key responsibilities in SDLC
- Project Requirements
  - Elicitation techniques
  - Business Rules and Specifications
  - Requirements Analysis
- Graphic Visualization
  - BPMN and UML concepts

# Example Questions 1

Which of the following techniques involves selecting the most important requirements to be included in the project?

- a) Requirements prioritization
- b) Scope validation
- c) Use case modelling
- d) Risk assessment

Which analysis technique involves comparing the current state of a process to the desired future state?

- a) Benchmarking
- b) Gap analysis
- c) Risk assessment
- d) Root cause analysis

# Example Questions 2

Which of the following is NOT a typical role of a business analyst in an Agile development team?

- a) Facilitating sprint planning meetings
- b) Writing code for the software product
- c) Conducting user interviews
- d) Creating user stories

Agile is an iterative and incremental software development methodology that emphasizes:

- a) Extensive documentation
- b) Rigorous change management
- c) Customer collaboration
- d) Fixed scope and schedule

# Example Questions 3

What is the role of a Data Object in a BPMN diagram?

- a) To represent the flow of control in the process.
- b) To define the sequence of tasks in the process.
- c) To represent data or information used or produced in the process.
- d) To define the message flow between participants.

In use case modelling, what does the "system boundary" represent?

- a) The physical location of the software development team.
- b) The scope and limits of the system being modeled.
- c) The network connections between users and the system.
- d) The timeline for project milestones.

- **IT BA Process Flow Example**

- <https://www.glowtouch.com/business-analysis-process-flow/>

- **BPMN**

- <https://www.bpmn.org>
- <https://www.lucidchart.com/pages/bpmn>
- <https://www.ibm.com/blog/bpmn/>

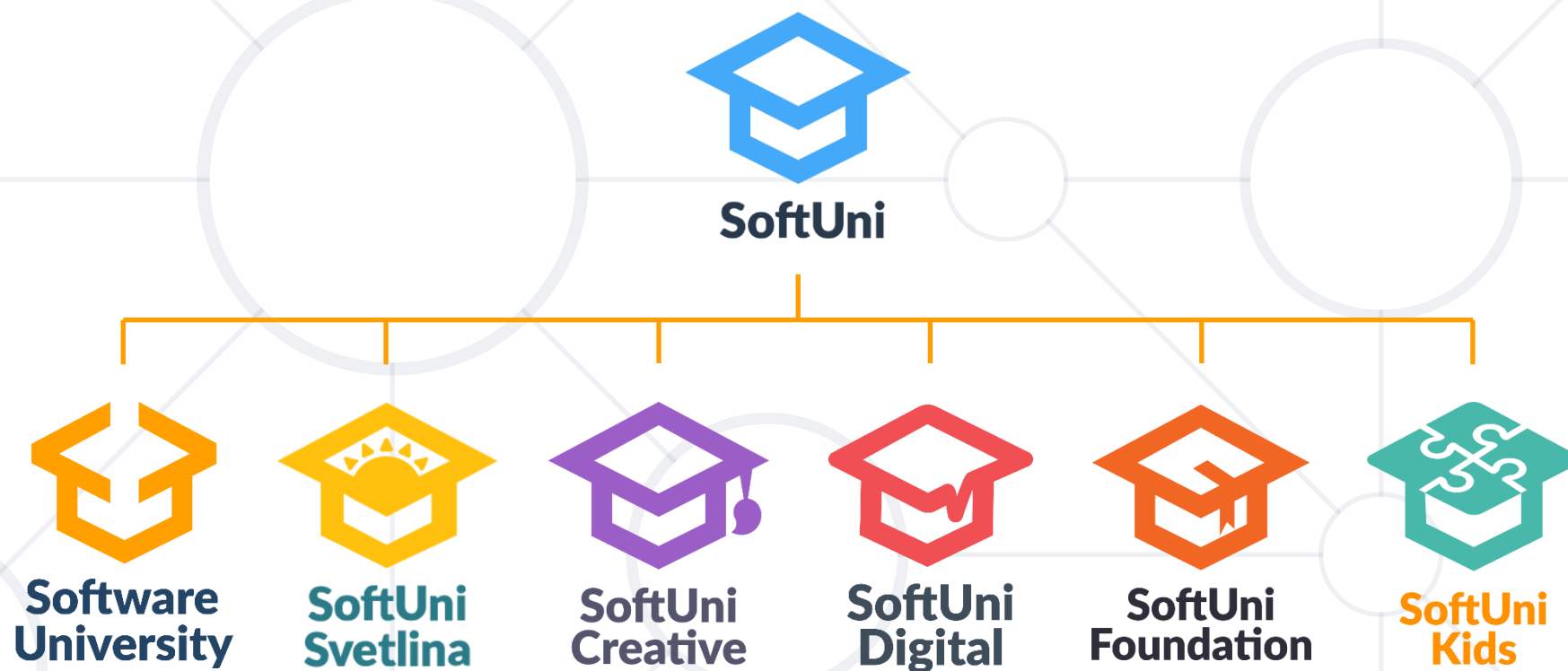
- **Use Cases**

- <https://www.lucidchart.com/pages/uml-use-case-diagram>
- <https://www.ibm.com/docs/en/rational-soft-arch/9.6.1?topic=diagrams-use-case>

- The **IT BA Process** is structured towards understanding the project requirements.
- One As Is BPMN and One To Be BPMN are required.
- Only one Use Case Diagram is required with 3 Use Cases being described.
- The **Theoretical Exam** will be 20 MCQ.



# Questions?



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