



**NAMIBIA UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY

**FACULTY OF COMPUTING AND INFORMATICS**

DEPARTMENT OF SOFTWARE ENGINEERING

<b>QUALIFICATION:</b> BACHELOR OF COMPUTER SCIENCE NQF: 7, BACHELOR OF GEOINFORMATICS NQF: 7	
<b>QUALIFICATION CODE:</b> 07BCMS, 07BGEI	<b>LEVEL:</b> 6
<b>COURSE:</b> SOFTWARE DESIGN	<b>COURSE CODE:</b> SDN621S
<b>DATE PUBLISHED:</b> 22 SEPTEMBER 2025	<b>GROUP PROJECT</b>
<b>DURATION:</b> 6 WEEKS	<b>MARKS:</b> 100

## **Project Description**

### **Group Project: Unemployment Youth Challenge**

**Objective:** The objective of this group project is to context sensitive digital intervention prototype interactions and user experiences that address the issue of high youth unemployment rates in Namibia. The project does not aim to solve unemployment directly but instead to explore digital solutions that address contributing factors, such as:

Information gaps (lack of awareness about job opportunities, training programs, funding sources).

Skills development (access to affordable or free online training and upskilling platforms).

Access to funding and entrepreneurship support (information about micro-loans, grants, or mentoring).

Networking and connection to opportunities (platforms where youth can connect with potential employers, NGOs, or government programs).

The target participant/user should be unemployed youth between the ages of 18-34. The project involves data collection, analysing and presenting collected data, identifying key factors contributing to unemployment rates, and proposing actionable solutions through a prototype, conducting thorough evaluation and testing. To ensure the software's functionality and performance, you will need to gather feedback from potential users and stakeholders to refine and improve the prototype. The entire design process needs to be documented, including requirements, design decisions, prototype (wireframe) details, and testing results. Finally, prepare a comprehensive presentation that showcases the project's objectives, methodologies, findings, and the final prototype (wireframe).

### **Project deliverables:**

#### **1. Concept Design**

The project should ensure thorough documentation of the informed consent from participants while focusing on the relevance of data gathering to provide valuable insights and inform design decisions. Emphasising creativity in interaction design and the novelty of proposed solutions, the aim is to effectively address the identified problem through user-friendly and intuitive design principles that enhance the overall user experience.

#### **2. Prototype**

The design approach should adhere to established principles, providing clear and detailed documentation that meets the needs of both developers and designers. Presentations of sketches, wireframes, and prototypes should be well-organised, ensuring a logical flow in user interactions to create a seamless and engaging experience. The process should be responsive to user feedback, demonstrating iterative refinements based on usability testing and insights.

### **3. Presentation**

Submit your PowerPoint presentation document through the e-learning platform and prepare for a group presentation during your scheduled practical class timeslot. Your presentation should clearly and effectively convey your ideas and concepts with confidence. Additionally, include a thoughtful reflection on the design process and outcomes, assessing both successes and areas for improvement.

### **4. Video Pitch**

Submit a two-minute (2 min) video that provide a comprehensive walk-through of your prototype, effectively showcasing the final interaction design solution.

#### **Group requirements:**

- Students need to group themselves (minimum 5 and maximum 8).
- Choose a group representative for your group.
- The group representative will upload all deliverables.
- Please indicate the [Student Number], [First Name], [Last Name] and [Practical class group] of all Project Team members.

#### **Advice**

- Before you start with your project, please brainstorm and have discussions in the group to revise and have a common understanding of skills gained from previous courses like Design Thinking, Database Fundamentals, Database Programming, Programming 1 and 2 etc.

**NOTE:** Please do a lot of research (online, library, etc.) and reading.

- Try to handle all project issues such as group members not participating.
- Marks will be allocated in relation to each individual's **contribution** to the project.
- **Each Team member will evaluate each member's contributions** to the project.
- An evaluation form will be available on elearning.
- Please feel free to contact your lecturer if you have any questions or problems regarding the project.

**Due date:** 7 November 2025 23H59

<b>Student Number</b>	<b>Student Initial &amp; Surname</b>	<b>Contribution</b> <i>(Describe the individual student contribution)</i>	<b>Rating (100%)</b> <i>(Give a rating out of a 100% according to contribution)</i>
StudentNo 1			
.....			
.....			
.....			
StudentNo N			

### **Plagiarism and use of generative AI**

Any AI used tools should be clearly acknowledged in the section where it is used.

All AI-assisted work will be reviewed and verified by your research team to ensure accuracy and relevance.

The main ideas, analysis, and conclusions remain the responsibility of the project team, not the AI tool.

Any use of AI should be acknowledged openly in the report and presentation.

If students are found to have plagiarised or used generative AI without the necessary acknowledgement, will have marks deducted as indicated in the table below:

The project should be submitted through **Turnitin**, the similarity software that is integrated into the E-Learning Management System. If plagiarism is detected, marks will be deducted as follows:

% Similarity Detected	% Marks Deducted
0 – 20	0
20 – 40	25
40 – 60	50
60 -100	100

It is the student's responsibility to be familiar with and adhere to the NUST's Policies. These Policies can be found in the NUST Prospectus or online on the NUST website.

### **Deliverables / Deadlines**

Please respect the deadlines.

- **All submissions are done on eLearning** (no hard copies, nor email submissions will be accepted).
- **NOTE:** Only ONE member (representative) from the group needs to upload the project components.
- Make sure you list all group member details in your submissions as it will not be added after submission.

PROJECT SCHEDULE			
Tasks/Deliverables	Due Date/Time	Venue	Weight
1. Concept Design	02 November 2025 23H59	E-Learning	35%
2. Prototype	02 November 2025 23H59	E-Learning	35%
3. Presentation - PowerPoint Slides - Presentation	03 November 2025 23H59 03 - 07 November 2025	E-Learning Practical class timeslot	15%
4. Demo video	03 November 2025 23H59	E-Learning	10%
5. Self-evaluation	07 November 2025	E-Learning	Based on Self- Evaluation Rating

## Project Deliverables: Scoring Rubric

Group Members: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

CRITERIA	PERFORMANCE LEVELS				
	Distinction	Merit	Credit	Pass	Fail
<b>1. Concept Design/idea of product (40 marks):</b> - Consent (5 marks)	Excellent documentation of the informed consent obtained from the participants. [5]	Good documentation of the informed consent obtained from the participants. [4]	Satisfactory documentation of the informed consent obtained from the participants. [3]	Unsatisfactory documentation of the informed consent obtained from the participants. [1-2]	No documentation of the informed consent obtained from the participants. [0]
- Data gathering and analysis (15 marks)	Excellent depth and relevance of data gathering to gain insight and analysis and presentation of data. [12-15]	Good depth and relevance of data gathering to gain insight and analysis and presentation of data. [8-11]	Satisfactory depth and relevance of data gathering to gain insight and analysis and presentation of data. [4-7]	Unsatisfactory depth and relevance of data gathering to gain insight and Analysis and presentation of data. [1-3]	No depth and relevance of data gathering to gain insight and analysis and presentation of data. [0]
-Context and problem identification (5 marks)	Excellent clear understanding of the context of the problem.	Good clear understanding of the context of the problem.	Satisfactory clear understanding of the context of the problem.	Unsatisfactory clear understanding of the context of the problem.	No clear understanding of the context of the problem.

	[5]	[4]	[3]	[1-2]	[0]
- Originality and Innovation (5 marks)	Excellent creativity in the interaction design concepts. Novelty and uniqueness of proposed solutions. [5]	Good creativity in the interaction design concepts. Novelty and uniqueness of proposed solutions. [4]	Satisfactory creativity in the interaction design concepts. Novelty and uniqueness of proposed solutions. [3]	Unsatisfactory creativity in the interaction design concepts. Novelty and uniqueness of proposed solutions. [1-2]	No creativity in the interaction design concepts. Novelty and uniqueness of proposed solutions. [0]
- Usability and Functionality (10 marks)	Excellent effectiveness of the concept in solving the identified problem. Ease of use and intuitive design. [8-10]	Good effectiveness of the concept in solving the identified problem. Ease of use and intuitive design. [5-7]	Satisfactory effectiveness of the concept in solving the identified problem. Ease of use and intuitive design. [3-4]	Unsatisfactory effectiveness of the concept in solving the identified problem. Ease of use and intuitive design. [1-2]	No effectiveness of the concept in solving the identified problem. Ease of use and intuitive design. [0]
<b>2. Prototype (40 marks):</b> - Approach (5 marks)	Excellent application of a design approach principles followed. Excellent prototype (wireframe) simulating user interactions [5]	Good application of a design approach principles followed. Good prototype (wireframe) simulating user interactions [4]	Satisfactory application of a design approach principles followed. Satisfactory prototype (wireframe) simulating user interactions [3]	Unsatisfactory application of a design approach principles followed. Unsatisfactory prototype (wireframe) simulating user interactions [1-2]	No application of a design approach principles followed. No prototype (wireframe) simulating user interactions [0]
- Documentation and Articulation (10 marks)	Excellent quality, clarity and detail of documentation to	Good quality, clarity and detail of documentation to	Satisfactory quality, clarity and detail of	Unsatisfactory quality, clarity and detail of	No quality, clarity and detail of documentation to



	meet both developers' and designers' requirements. Well-organised presentation of sketches, wireframes and prototype. [8-10]	meet both developers' and designers' requirements. Well-organized presentation of sketches, wireframes and prototype. [5-7]	documentation to meet both developers and designers' requirements. Well-organized presentation of sketches, wireframes and prototype. [2-4]	documentation to meet both developers and designers' requirements. Well-organized presentation of sketches, wireframes and prototype. [1]	meet both developers' and designers' requirements. Well-organized presentation of sketches, wireframes and prototype. [0]
-User Interaction Flow (15 marks)	Excellent coherence and logical flow of user interactions, seamless and engaging user experience. [12-15]	Good coherence and logical flow of user interactions, seamless and engaging user experience. [8-11]	Satisfactory coherence and logical flow of user interactions, seamless and engaging user experience. [4-7]	Unsatisfactory coherence and logical flow of user interactions, seamless and engaging user experience. [1-3]	No coherence and logical flow of user interactions, seamless and engaging user experience. [0]
-Evaluation and Iteration (10 marks)	Excellent responsiveness to user feedback. Evidence of iterations based on usability testing and feedback. [8-10]	Good responsiveness to user feedback. Evidence of iterations based on usability testing and feedback. [5-7]	Satisfactory responsiveness to user feedback. Evidence of iterations based on usability testing and feedback. [2-4]	Unsatisfactory responsiveness to user feedback. Evidence of iterations based on usability testing and feedback. [1]	No responsiveness to user feedback. Evidence of iterations based on usability testing and feedback. [0]
<b>3. Presentation and Reflection (20 marks):</b>	Excellent clarity and effectiveness of the presentation. Ability to convey ideas and concepts clearly and confidently.	Good clarity and effectiveness of the presentation. Ability to convey ideas and concepts clearly and confidently.	Satisfactory clarity and effectiveness of the presentation. Ability to convey ideas and concepts	Unsatisfactory clarity and effectiveness of the presentation. Ability to convey ideas and concepts	No clarity and effectiveness of the presentation. Ability to convey ideas and concepts clearly and confidently.

- Presentation Skills (10 marks)	Excellent insightful reflection on the design process and outcomes. Evaluation of successes and areas for improvement. [8-10]	Good insightful reflection on the design process and outcomes. Evaluation of successes and areas for improvement. [5-7]	clearly and confidently. Satisfactory insightful reflection on the design process and outcomes. Evaluation of successes and areas for improvement. [2-4]	clearly and confidently. Unsatisfactory insightful reflection on the design process and outcomes. Evaluation of successes and areas for improvement. [1]	No insightful reflection on the design process and outcomes. Evaluation of successes and areas for improvement. [0]
-Video Pitch (10 marks)	Excellent provision of a walk-through of the prototype and make sure that it clearly showcases final solution (interaction design). [8-10]	Good provision of a walk-through of the prototype and make sure that it clearly showcases final solution (interaction design). [5-7]	Satisfactory provision of a walk-through of the prototype and make sure that it clearly showcases final solution (interaction design). [2-4]	Unsatisfactory provision of a walk-through of the prototype and make sure that it clearly showcases final solution (interaction design). [1]	No provision of a walk-through of the prototype and made sure that it clearly showcases final solution (interaction design). [0]
<b>TOTAL MARKS: /100</b>					

<<<<<<End of Project Document>>>>>>