



Republic of Rwanda  
Ministry of Education

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**RTB** | RWANDA  
TVET BOARD

**SWDUX301**

**UI/UX DESIGN**

**DESIGN UI/UX**

**Competence**

**RQF Level: 3**

**Learning Hours:**



**100**

**Credits: 10**

**Sector: ICT & MULTIMEDIA**

**Trade: SOFTWARE DEVELOPMENT**

**Module Type: Specific**

**Curriculum: ICTSWD3001- TVET Certificate III in Software Development**

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Purpose statement	This module describes the skills, knowledge and attitude required to design UI/UX for software and web applications. At the end of this module, the students will be able to Analyse User Experience through defining User journey the trainees will be able to design software Mockup.				
Delivery modality	<b>Training delivery</b>	<b>100 %</b>	<b>Assessment</b>	<b>Total 100%</b>	
	Theoretical content	20%	Formative assessment	30%	
	Practical work:			80%	70%
	Group project and presentation	30%			
	Individual project /Work	50%	Summative Assessment	50%	

## Elements of Competency and Performance Criteria









Elements of competence	Performance criteria
1. Analyze user experience	1.1 UX Research is properly performed based on user requirement and project goals
	1.2 Brand identity is properly analyzed based on project branding assets
	1.3 Tasks are properly defined based on research findings
	1.4 End user pain points are appropriately identified based on research findings
2. Define the user	2.1 User story is properly defined based on user requirements
	2.2 User personas are properly defined based on user stories

	2.3 User journey is properly mapped based on user stories
	2.4 UX brief is properly prepared based research findings
3.Design Mockup	3.1 Design tools are properly identified based on project requirement
	3.2 Wireframe is concisely designed based on user stories
	3.3 Mockup is properly designed in line with client needs, project requirements, user needs & brand identity
	3.4 Prototype is properly presented based on designed mockup



## Course content

Learning outcomes	At the end of the module the learner will be able to: <ul style="list-style-type: none"> <li>1. Analyse User Experience</li> <li>2. Define the User</li> <li>3. Design Mockup</li> </ul>
<b>Learning outcome 1: Analyse User Experience</b>	<b>Learning hours: 30</b>

Indicative content
<ul style="list-style-type: none"> <li>● <b>Definition of Key Concepts</b> <ul style="list-style-type: none"> <li>✓ User experience</li> <li>✓ User experience research</li> <li>✓ Research Findings</li> </ul> </li> <li>● <b>Description of UX Research</b> <ul style="list-style-type: none"> <li>✓ UX Research Methods and Approaches</li> <li>✓ Benefits of UX Research</li> </ul> </li> </ul>

- ✓ UX Researcher role and Responsibilities
- ✓ Types of UX Data
  -  Quantitative UX Data
  -  Qualitative UX Data
- ✓ Steps of UX Analysis
  -  Identification of user issues
  -  Organization of UX data
  -  Looking for recurring issues
  -  Prioritization of fixes
  -  Sharing of findings and recommendations
  -  Building and testing new features

- **Analysis of Brand Identity**

- ✓ Definition
  -  Brand
  -  Brand Identity
- ✓ Identification of brand design principles
- ✓ Identification of Brand Personas
- ✓ Identification of Brand Competition


- **Definition of Tasks**


- ✓ Understand product specifications and user psychology
- ✓ Interpret data and qualitative feedback
- ✓ Create user stories, personas, and storyboards
- ✓ Define the right interaction model and evaluate its success
- ✓ Develop wireframes and prototypes around customer needs
- ✓ Find creative ways to solve UX problems (e.g. usability, findability)
- ✓ Work with UI designers to implement attractive designs
- ✓ Communicate design ideas and prototypes to developers

- **Identification of end user pain point**

- ✓ Definition

✓ Levels of end user pain points

 Interaction-level pain point

 Journey-level pain point

 Relationship-level pain point

**Resources required for the learning outcome**

Equipment	Computer Projector White-Board
Materials	Markers Internet Papers Pencils Pens
Tools	Figma Trello Adobe XD
Facilitation techniques	Demonstration and simulation Individual and group work Trainer guided Group discussion
Formative assessment methods /(CAT)	Written assessment Presentation Product assessment


**Learning outcome 2: Define the user**

**Learning hours: 30**

Indicative content

- **Definition of key terms**
  - ✓ User story
  - ✓ User personas
  - ✓ User journey
  - ✓ UX brief (UX project brief)
- **Creation of user story**
  - ✓ Characteristics of user story
  - ✓ Benefits of user stories
  - ✓ Create user story
- **Identification of user personas**
  - ✓ Importance of user personas
  - ✓ Characteristics of user personas
  - ✓ User personas in design process
    - ✚ Understand (Empathize, Define)
    - ✚ Explore (Ideate, Prototype)
    - ✚ Materialize (Test, Implement)
  - ✓ Steps of creating user personas
- **Creation of user journey**
  - ✓ Types of user journey map
    - ✚ UX journey map
    - ✚ Sales journey map
    - ✚ Customer experience journey map
  - ✓ Elements of a user journey map
    - ✚ Persona
    - ✚ Scenario
    - ✚ Stages of the journey
    - ✚ User actions
    - ✚ User emotions and thoughts

 Opportunities

 Internal ownership

✓ Create user journey map

- Perform UX Research

### Resources required for the indicative content

Equipment	Computer Projector White-Board
Materials	Markers Internet Papers Pens
Tools	Figma Trello Adobe XD
Facilitation techniques	Demonstration and simulation Individual and group work Practical exercise Trainer guided Group discussion
Formative assessment methods /(CAT)	Written assessment Performance assessment Product based assessment


Indicative content

- **Description of Key Concepts**


- ✓ User interface
- ✓ User experience
- ✓ Importance of UX/UI design the software development
- ✓ Important principles of user experience design


- ✓  Clarity

- ✓  Consistency

- ✓  User control

- ✓  Comfort

- ✓  Ease of Use

- ✓  Accessibility

- ✓ UX design process key phases
- ✓ Wireframe
- ✓ Mockup
- ✓ Prototype
- ✓ Distinction from wireframe, mockup and prototype
- ✓ Information Architecture
- ✓ Design thinking process
- ✓ User-centered design
- ✓ Usability
- ✓ 3-Clicks rule
- ✓ Feedback

- **Use of Figma prototyping tool**

- ✓ Setup Figma

✓ Figma interface

 Canvas

 Frames

 Menu

 Layers


 Design Panel

 Pages

 Inspect Panel

 Options

 Prototype

 Assets


✓ Figma Mirror

● **Sketch wireframe**

● **Sketch mockup**

✓ Setting up files

 Creating file

 Create and edit frames


 Creating pages


✓ Management of layers


✓ Application of contents in design


 adding predefined shapes

 Add custom shapes

 Pen tool

 Add Images

 Masking

 Effects and blending

 Strokes

 Management of layout (Auto-layout, Grid, Row, Columns)

 Application of element alignments

✓ Creation of color palettes

✓ Creation of components

 Reusable input components

 Reusable checkbox and radios

 Reusable button components

 Content cards


✓ Application of mockup design

 Content sections


 Navigation bar

 Sidebar menu

 Dropdown menu

 Design simple online shopping platform with Items listing, cart, checkout

 Design authentication pages

 Design a B2B platform

✓ Test design using Figma Mirror

● **Presentation of Prototype**

✓ Starting prototyping

✓ Adding interactivity to the design

✓ Present Prototype

**Resources required for the indicative content**

Equipment

Computer

Projector

White-Board

Materials

Markers

	Internet Papers Pens
Tools	Figma Trello Adobe XD
Facilitation techniques	Demonstration and simulation Individual and group work Practical exercise Trainer guided Group discussion
Formative assessment methods //(CAT)	Written assessment Performance assessment Project based assessment

### Integrated/Summative assessment (For specific module)

## Integrated situation

BE-WISE is an NGO with the mission of promoting education in Rwanda especially in TVET schools, their office is located in GASABO District and they have organized a competition of the innovative project for students from different TVET schools. But they have a problem of collecting the student's applications from every school. They suggest having an MIS that will facilitate the students to apply and find more information about the competition.

So, they want to hire a user experience (UX) designer that will create a mockup and then present the prototype for that MIS. As a UX designer, you are requested to create a mockup that will be used by the web application developers to create a website that will perform that task.

The system will have the way all users can make authentication. A student can make an application to be reviewed by administrators. Administrators will be able to view and make

decisions on the student applications in order to notify the accepted and rejected projects. The students will be able to know whether s/he has been selected or not.

The system should be easy to use and adhere consistency in designs.

This work is supposed to be done in 8 hours.

### Resources

<b>Tools</b>	<b>Figma</b>
	<b>Trello</b>
	<b>Adobe XD</b>
Equipment	Computer
Materials/ Consumables	Papers Pens Pencils

Assessable outcomes	Assessment criteria (Based on performance criteria)	Indicator	Observation		Marks allocation
			Yes	No	
Analyze user experience (15%)	Brand identity is properly analyzed based on project branding assets	Tools are selected			5
		Brand identity is defined			5
	End user pain points are appropriately identified based on research findings	User pain points are identified			5
Define the user (30%)	User story is properly defined based on user requirements	User story is defined			3
		User story is created			6

		Brand competitions are identified			5
	User personas are properly defined based on user stories	Brand personas are identified			5
	User journey is properly mapped based on user stories	User journey is done			6
		UX brief is prepared			5
Design Mockup (55%)	Design tools are properly identified based on project requirement	Tools are selected			2
	Wireframe is concisely designed based on user stories	Wireframe is designed			5
	Mockup is properly designed in line with client needs, project requirements, user needs & brand identity	Figma prototyping tool is used			3
		Files are set			5
		Layers are managed			5
		Application design are applied			5
		Components are created			5
		Mockup design is applied			5
		Test design using Figma Mirror is done			5
	Prototype is properly presented based on	Prototype is created			5

	designed mockup	Interactivity to the design is added			5
		Prototype design ipresented			5
Total marks		100			
Percentage Weightage		100%			
Minimum Passing line % (Aggregate): 70%					

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