

# Bahir Dar University

Bahir Dar Institute of Technology Faculty of Computing

Requirement Design Document (RDD)

For

Industrial project on [Your Project title here]

Submitted to the faculty of computing in partial fulfillment of the requirements for the degree of Bachelor of Science in [your program of study here]

Group members	Name	ID Number
1		
2.		
4		
5		
6		
Advis	sor :	

[Year]

**Bahir Dar University, Bahir Dar Institute of Technology** 

### **Declaration**

The Project is our own and has not been presented for a degree in any other university and all the sources of material used for the project have been duly acknowledged.

	Name	•	Signature	
	Name	-	Signature	
	Name		Signature	
	Name	•	Signature	
	Name	-	Signature	
	Name		Signature	
Faculty:	Computing			
Program:				
Project Title	e:			
This is to	certify that I have read	this project and	that in my supervision and t	he students'
performance	, it is fully adequate, in	scope and quality,	as a project for the degree of	Bachelor of
Science.				
Nameof Adv	visor		Signature	
Examining	committee members		signature	Date
<ol> <li>Examine</li> <li>Examine</li> </ol>	r)			

It is approved that this project has been written in compliance with the formatting rules laid down by the faculty.

### **Roles and Responsibilities of the Group Members**

Fill the following role assignment matrix and put a tick  $mark(\sqrt{})$  under each member in line with each task to indicate who has participated in carrying out the activities to produce the draft deliverable for discussion to the group so that they will discuss on the issue and come to consensus. Finally each group member will well understand the entire work of the project by sharing experiences among the colleagues.

List of	List members		
Tasks			
	Student1	Student 2	Student3
Task1			
Task2			
Task3			
Task4			
•			

# Acknowledgment

# List of acronyms

Write Expand form of abbreviations and short hands.

## **List of Figures**

Generate a list of figures used in the document with their figure sequence by indicating their page number

## **List of Tables**

Generate a list of tables used in the document with their table sequence by indicating their page number

### **Table of Contents**

### **Contents**

Declarati	on	
Roles and	Responsibilities of the Group Members2	
Acknowledgment		
List of ac	ronyms	
List of Fig	gures5	
List of Ta	bles6	
Table of 0	Contents	
Abstract.	1	
Chapter 3	3: System Design	
3.1	Architectural Design	
3.1.1	Component modeling	
3.1.2	Deployment Modeling	
3.2	Detail Design	
3.2.1	Design class model	
3.2.2	Persistent model	
3.3	User Interface Design	
3.4	Access control and security	
Chapter 1	Four: Implementation4	
Chapter Five: Testing and Evaluation		
References		
Appendices		

## Abstract

Write the executive summary of the work done in the project

### **Chapter 3: System Design**

Explain the purpose and design goals of the system by using different criteria, like Performance, Dependability, end user...etc

#### 3.1 Architectural Design

Try to illustrate the current software architecture of your system if any. Subsystem diagram shows the service it provides or it accepts from other subsystems, and the coupling and the coherence between them.

#### 3.1.1 Component modeling

Systems may be built from components in component based architecture. Component diagram shows how objects (classes) in your system are grouped together and form components. The components interact with each other either in giving service to other components or requesting service from other component. Show the relationship between software components, their dependencies and communications.

#### 3.1.2 Deployment Modeling

Deployment diagram show how the system is deployed on computers. In other words, it shows which component of the software is installed on which machine and how they communicate with each other if they are on different machines. Indicate where each component will be located, on what servers, machines or hardware. The deployment model should clearly show the physical communication links between hardware and software items like what runs where, etc.

#### 3.2 Detail Design

#### 3.2.1 Design class model

Show the **Design Class Model**. That is, classes with their attribute data types, methods with their return types and arguments and their data types, relationships, Access visibility, multiplicity and role)

#### 3.2.2 Persistent model

If you use object oriented databases for your system instead of relational databases, instead of designing E-R diagram, design persistence models. Show the mappings and the relations of thetables.

Show the persistent model for your system. That is classes with their attributes and data types, length of attributes, and keys, foreign keys relationships, multicity and role.

### 3.3 User Interface Design

Show the design of the user interface of the system using implementation tool which you have already chosen.

### 3.4 Access control and security

In the systems, different actors have access to different functionality and data. Define the access controls for your system.

### **Chapter Four: Implementation**

Writing the code based on the design you have created in design phase. You can use any programming language but if the system is designed in Object Oriented methodology, the implementation should be based on classes and hence you should use object oriented programming language.

Include comments inside the code to add readability.

# **Chapter Five: Testing and Evaluation**

### References

Include the list of relevant literatures referenced in this document so readers can easily find that you've cited. (Use Standard style of writing a reference)

## Appendices

The following items can be attached as necessary

- Sample of Working forms which are taken from the business to be automated
- Questionnaire and interview questions used during requirement gathering
- pictures /photos relevant to the project work