

# INTRODUCTION

Welcome to DSO34BT 2021 S1  
DSO34BT phased out by 2022  
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## IMPORTANT NOTES

This is 3rd level course

Students must have completed / doing 2nd level courses including:

- Datatase course
- Programming
- Software engineering
- You will be using what you learned from the above courses.

## OVERVIEW ...

Assessments in the course [ No tests, No Exams]

- Deliverable 0 / Project Name + group members
- Deliverable 1 / Assessment 1: 7%
- Deliverable 2 / Assessment 2: 13%
- Deliverable 3 / Assessment 3: 10%
- Deliverable 4 / Assessment 4: 20%
- Deliverable 5 / Assessment 5: 50%

## PROJECT WORK: IN TEAMS $\leq 4$ MEMBERS



Implement one idea as a website project. This must be a dynamic website.

- Start working on your project now
- Stand up meetings [10 minutes long] once a day / once a week, to discuss progress, challenges and resolve these
- Consult regularly

...

- Decide on a language / framework / IDE and learn this and stick to it soon as possible
- Take note of due dates, submissions that are a week late will not be marked
- There will be alot of presentations [Slides] and demonstration [Show your project work [run it]

## ASSESSMENT 0

Due Date: 07 / May / 2021: Email me your group name, and all group members [Name, student number, gmail]

# ASSESSMENT 1 [PROPOSAL]

Due Date: 14 / May / 2021: Submit .PDF document



# COVER PAGE

Group / System name

Group members: [ Name ] [Surmane] [Student  
number] [email: gmail].

# TABLE OF CONTENTS

# INTRODUCTION

## One paragraph

Briefly state what your system is all about, what business is the system designed for and what it is that you want to automate. Highlight users or actors in your system. State why it is necessary to have such a system

## BACKGROUND

**i** Half a page to one page long

- Expand on issues that made you realize the need to develop such a system, you may have seen problems where you stay, or where study or your daily activities ect
- List three similar systems that exist, who developed these systems, What are the shortcomings you will address [If Any]

## BACKGROUND ....

- These systems will be a benchmark to your project, most of the business processes for your project should be informed by the business processes in the existing systems
- Discuss IDE, languages and database management [DBMS] tools you will be using to develop the system [look for open source IDEs, DBMS]

**⚠ Do not use C++,  
ORACLE, access**

## REQUIREMENTS:

List all functional Requirements

Discuss non-functional requirements

## USE CASE DIAGRAM

Draw a use case diagram that models how actors in your system interact with the functions show clearly some use cases that depend / use other use cases

You can use [diagrams.net](https://diagrams.net) for this, BUT there are many other UML applications that are freely available.

## BUSINESS PROCESS

- Draw Business processes for all transactions / goals users may need to complete in your system
- Business processes models what actions are performed by each actor, your system, in order to complete one business goal
- A sequence of actions, interaction that are performed by each actor, and how the system modules respond as information flows in order to complete a business transaction / business goal
- Business process combines use cases and system responses to achieve a single goal



## SYSTEM OVERVIEW

Draw a block diagram showing major components of your system

- Views / Graphic user interface sections
- Logic / middle tier [Scripts section that sends information between database and User interface]
- Database

## PLANNING

- The project will not happen and be completed all at once
- Work break down,[Tasks backlog] leading to deliverables [Assessments]
- Gantt-chart, clear start-date, end-date and person responsible for each task
- **More on Gantt-Chart**
- Use **Wrike** free trail, or any other project planning software

## ASSESSMENT 2 DUE DATE: 21 MAY 2021

Implement 3 or more business processes Submit .zip  
file containing the following

 Code



Database file [.sql]



ERD generated from DBMS



Test case document



Present your proposal [Slides] + Demonstrate your  
implementation

## ASSESSMENT 3 DUE DATE: 28 MAY 2021

Implement all remaining business processes Submit  
.zip file containing Code, database file [.sql]

implementing the following:

- Finalize your Graphic user interface [Logo, footer, header]
- Make use of tables where necessary to display data, use sensible table column headings
- Make use of dropdowns, make these dynamic

## ASSESSMENT 4 DUE DATE: 10 JUNE 2021



Finalize your Pages design You will submit .zip file

Code,.sql file, ERD: implement the following

- Email / SMS notifications sent to actor as necessary from business process / use case.
- Filtering should be implemented [Get weekly, monthly,statistics] this will vary depeding on what your project is about
- Consistant design [look and feel] same header, footer, logo in all pages, website color schemes

## ASSESSMENT 4 DUE DATE: 10 JUNE 2021

You will submit .zip file containing code, implement the following

- Use external APIs where necessary
-  Upload functionality
-  Download functionality
- Input validation, passwords, email, dates ect
- Consistant design [look and feel] same header, footer, logo in all pages, website color schemes
- Demonstrate your project in class

## ASSESSMENT 5 OUR EXAM

Date: "Exam time slot" Submit the following:

- Code
- Manual .PDF: How to use the system.. screen shots of the different application views can assist here, and brief explanation of what each screen is all about
- Present your Project, [Slides]
- Demonstrate your complete system: Run your system showing evaluators

## ADMIN MATTERS

We need a class rep:

- Time table: Tuesday : 1400hrs -1600hrs, Thursday: 1200hrs: 1400hrs
- Attend once a week, with your group members
- Only 20 students can be allowed in a lab [~5 students per group]
- The plan: see 4 groups per 1.5 hrs [booking slots will be published]
- You can consult any other time by setting up a ms teams meeting, email me so we agree on date and time



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