Phase 2

Data Dictionary

Var / Array / Textfile	Data type / Number of items etc	What will it be used for

Database design
Entity-relationship diagram:

Name of parent table
Field 1 (PK)
Field 2
Field 3
Field 4
Field 5

1 ⟶

Name of child table
Field 1 (PK)
Field 2
Field 3
Field 4
∞ Field 5 (FK)
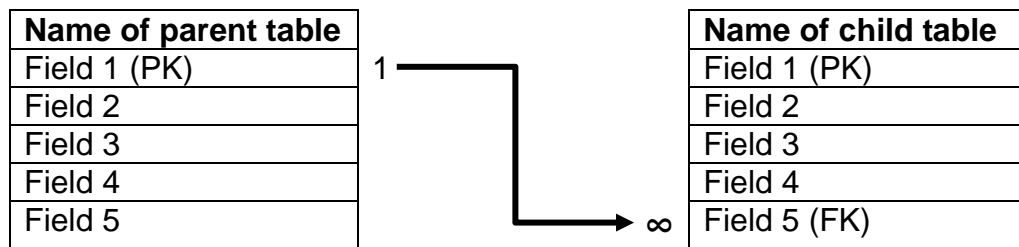
1. Create and save database in **11ITPhase2SurnameName** folder:

   a. TWO tables

   b. Choose primary key for each table.

   c. 1 to many relationship

   d. 1 should be in parent table – this fields should be the primary key in this table

   e. Many will be in the child table. This field cannot be the primary key in this table or a many relationship will not exist.

   f. Fields should not contain values that can be calculated

   g. Fields should not be repeated in the two tables – except the one field you are linking through

   h. Choose correct data types

   i. For text data types – change the size to be less than 255

   j. Do not have name and surname as one field. Separate these type of fields in two.

   k. Have about 3 records in each table before you do the link for this phase.

Data capturing

GUI

Screenshots of forms:

Take into consideration the following when designing the forms:

1. GUI design principals (Use objects that reduce user input errors – use arrows on screenshots with textboxes labelling the objects to refer to table below)
2. Ease of use, logical flow (Input left top, flow to right bottom processing and output)
3. Clearly marked navigation (next, previous, main – to go from one form to the next, exit)
4. Friendly Dialog
5. Help (buttons/menus)
6. Use colours and pictures that suits the user

TOE Chart

Tips:
- List all objects on your form in the middle column below.
- Complete the table by describing the task it has to perform in the left column.
- If there is an event linked to the object enter that in the right column

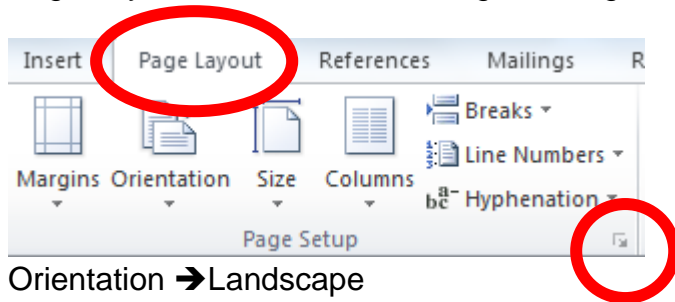Example below: If you just enter my example you will earn NO marks.

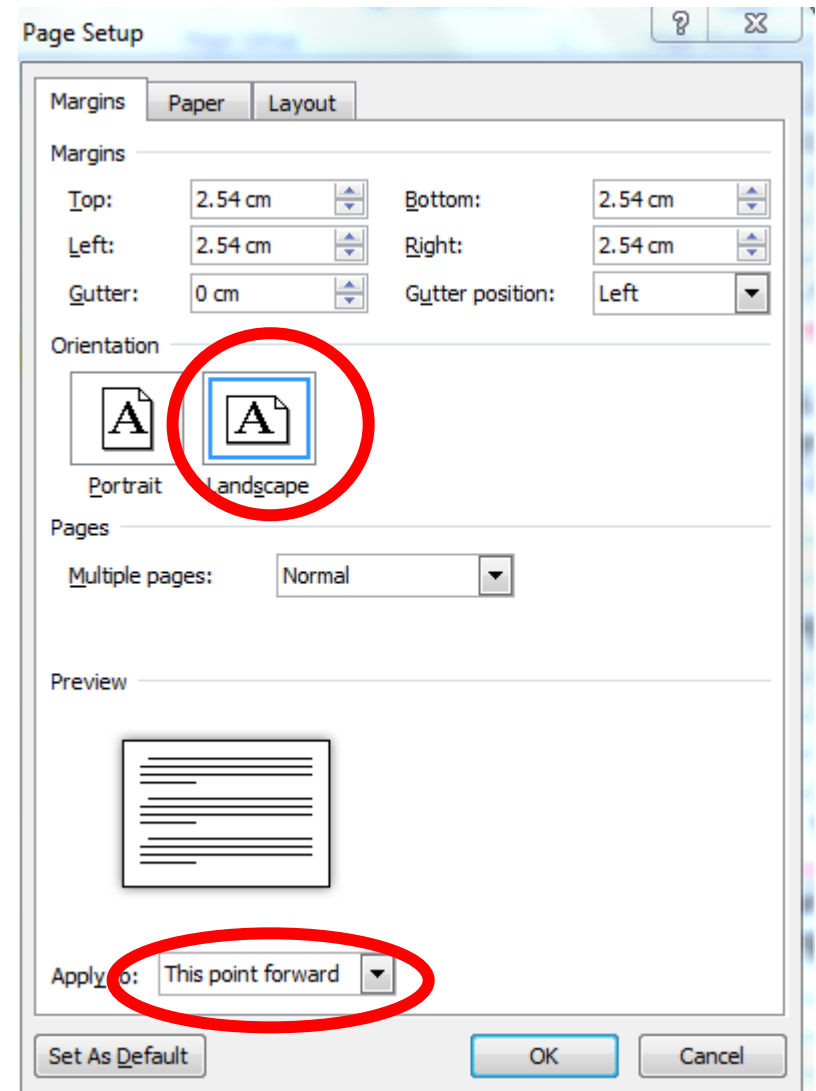| Task	Object	Event
Get User Information		
User name	edtName	
User surname	edtSurname	
User ID	edtID	
Create username	btnCreate	Click
Display username	lblUsername	

IPO table

TIP: Start this section on a new page.

In MS Word

- Page Layout➔ Arrow on to the right of Page setup

- Orientation ➔Landscape
- Apply to ➔This point forward

Input

Part of program	What	Var Name	Data Structure	Global/ Local?	Object
Home form Button calculate					

Tips:
- Add the objects from your TOE chart that is related to Input under the Object column.
- Group input together in the left column into parts of your program.
- Repeat those groups in processing and output tables below.

Validation / Error Catching

Tips:
- Copy the Object column from your Input table below under the What column. Each input object should be validated.
- Refer to your binder **Data validation** for help.

Input

What	How: Algorithms	Message

Processing

Part of program	What	How ➔ Algorithms
Home form Button calculate		

Tips: Repeat the groups in Input table above

Output

Part of program	What	Purpose	Object	How: Format / Data type

Tips: Repeat the groups in Input table above