



Information and Communication Technologies

Communication Sciences

1st year 2nd
semester
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Faculty of Philosophy and Social Sciences

Miguel Vilaça

Portuguese Catholic University

Excel Work

The work will be done in groups of 3 students, groups that will be set up on Moodle.

The submission runs until April 25th (inclusive), sharing the file **group#.xlsx**, where # is the **group ID**, with jvilaca@ucp.pt

The paper defenses will take place on April 28th; each group will schedule, on Moodle, one of the available times.

Absence from the defense implies a null evaluation. The final evaluation after the defense is individual, and may differ among the members of the group depending on the performance in the defense.

Enunciation

The current economic climate requires greater control of expenses, and students in higher education are no exception. Our goal is to create an O365 Excel file that controls expenses incurred while attending a higher education course.

In a table you should register the entities - companies or entities - where the expenses are made. Examples of entities are Universidade Católica, Livraria da Esquina or Transportes ParaTodos. This table should, for each entity, include:

- the name of the entity
- a contact number
- a contact email

In another table you should record the types (or categories) of expenses. Some examples are (the following are only indicative, adapt to your needs):

- tuition fees
- transport
- educational material
- books
- feeding

In yet another table, course expenses should be recorded, with each expense listed:

- Date of expenditure
- Time (hours and minutes) of expenditure
- Total cost in €
- Description of the expense
- Type (values should be restricted to those in the type table and easily selected from a list)
- Name of the entity (the values should be restricted to those in the entity table and easily selected from a list)

- Contact number of the entity (automatically obtained from the table of entities)
- Part of day (morning/afternoon/evening) at which took place a expenditure took place, automatically calculated from the time field:
 - Morning between 7:00 a.m. and 1:00 p.m.

- Afternoon between 13h00 and 19h00
- Night for the remaining parts of the day
- Remarks

Only the remarks field is optional and can be left empty. All other fields must be filled out.

1. Distribute the information and features conveniently over sheets and organize them.
2. When possible use names that are easily associated with the data.
3. Create 10 expense records.
4. Allow fast filtering of these records.
5. Format and validate the data:
 - a. The date must be in the format YYYY/MM/DD
 - b. The time must be in the format HH:MM
 - c. Monetary values are in euros with cents and separated by thousands
 - d. Only valid types can be entered
 - e. Only valid entities can be entered
6. The total cost should be accompanied (in the same cell) by a bar indicating its size, compared to the other values in the same field.
7. The record table must contain the following totals:
 - a. The average schedule
 - b. The sum of expenses
 - c. Counting the expenses (in the description field)
8. To make it easier to identify the types of expenses in the record table, each type should automatically be colored a different color.
9. Expense analysis, tabulated by months (and years) and by entities, and can be restricted to one or more types.
10. Graphical analysis of expenses by type.