**REPUBLIQUE ALGERIENNE DEMOCRATIQUE ET POPULAIRE**

**MINISTERE DE L’ENSEIGNEMENT SUERIEUR**

**ET DE LA RECHERCHE SCIENTIFIQUE**

**UNIVERSITE DE MOSTEFA BEN BOULAÏD**  **BANTA 2**

**DEPARTEMENT D'INFORMATIQUE**



**Graduation Project**

**Students:**

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**Group:** 06

**YEAR:**

**2020/2021**

# Theme:

Private Lessons School Manager, a Desktop application that manages: students, teachers, groups, profits and expense.

# Software Requirements:

## Functional:

- User must create account when he uses the app for the first time.

- Ability to manage (view/add/remove/edit) students:

• Student can be assigned to many groups.

• Student can pay more than 1 month.

- Ability to manage (view/add/remove/edit) group:

• Each group has a price assigned to it.

• Each group has a percentage (%) for teacher and for the school.

• Each group have X amount of lessons per week.

• Each group have 4 weeks/month => X \* 4 = T (total lessons per month).

• After T of lessons, student is prompted to pay the fees of the new month.

• If teacher is absent, User must set the lesson canceled.

• Canceled lessons don’t count.

• User can set the student present/absent.

• At the end of group’s month (after T lessons), teacher get paid.

- Ability to manage (view/add/remove/edit) teachers.

- Ability to manage (view/add/remove/edit) expense:

• User can view monthly/total expense.

• Teachers payment count as an expense.

- User can check latest news:

• Every time app is opened, the news list is updated.

• User can mark news as read to remove it from the news list.

- Types of news:

• End Group’s month (to pay the teachers).

• Student month ended.

• Student is absent for more than N times.

- User can view statistics:

• Total students/teachers/group count.

• Total profit/expense.

• Monthly profit/expense.

- Profits come from School’s percentage (%) when a student pays his monthly fees.

## Non-Functional:

### Security:

### - Authentication.

**-** Every action must be confirmed.

### Portability / Compatibility:

- Ability to run on Linux/Windows.

- Ability to switch between databases.

### Performance:

- Low CPU/Memory usage (Can run on older machines).

- Fast launch time.

## Usability:

- Simple User Interface.