

## Programming Languages 2

### Lesson 7

Finish a project to represent a diary.

1. Download the project from the homepage of the class.
2. Implement the `Diary` interface so that the methods of it work as they name tell.
  - `AddEntry` adds a new entry to the diary
  - `printAllEntries` prints out all entries of the diary
3. Override the `toString` method of the `Entry` class. It has to print out the date and the text in the following format:

```
mm-dd-yyyy
texttexttexttexttexttexttexttexttext
texttexttexttexttexttexttexttexttext
texttexttexttexttexttexttexttext...
```

4. Add a `setDate` method to the `Entry` class. It gets a `String`, and sets the date of the `Entry`. The required format is `mm-dd-yyyy`
5. Add a parameterized constructor to the `Entry` class. It gets two `String` parameters, with which it sets the properties of the `Entry`.
6. Create a new custom exception named `WrongDateException`. Throw this Exception from the `setDate` method if the numbers representing the month and the day are out of their limits.
7. Catch the `WrongDateException` in the main class if it appears. In the catch branch print out that the date format is wrong...
8. Override the `equals` method of the `Entry` class. Two entries are the same if their dates are equal.
9. Modify the `addEntry` method of the `MyDiary` class so that if the user tries to add an entry with an already existing date, the method concatenates the text to the old entry instead of creating a new one.
10. Add an entry to the diary to the day 11-23-2013, and check the result.