

CSIT214/CSCI814 – IT Project Management

Group Project

Spring 2018

Project title: Developing a cross-language plagiarism detection tool

Total marks: 40

Submission deadline:

- (1) Progress report is due in **week 4 lab**, where a two-page hardcopy progress report and two-minutes oral presentation are to be given to the tutor. The progress report should include the current progress and future project plan.
- (2) A softcopy (preferably an MS PowerPoint file or a PDF file generated from the PowerPoint file) of the group's final project presentation must be submitted to Moodle (deadline: **11:30 am, Tuesday 23 Oct 2018**).
- (3) A hardcopy of the group's final project report and presentation slides, together with their softcopies, program code, and supplementary data (in a USB or disk storage), must be submitted to the lecturer in person at the start of **week 13 lecture**.
- (4) Each group must give a final project presentation in **week 13 lecture**. All group members must stand in front of the class during their presentation, although we do not require every student to speak.

Note: The submitted hardcopies and softcopies must be identical.

Assessment of individual team members:

On the cover page of your report, indicate the contribution of each team member, and everyone in the team should sign. Different team members may receive different marks based on their individual contribution. The "individual contribution" of each team member is assessed by all the other members (the scale is: "contributed", "very little", and "almost no contribution"). For a team member who has "contributed", he/she will receive 100% of the group mark; for a team member who contributed "very little", he/she will receive 50% of the team mark; for students who made "almost no contribution", he/she will receive 0 marks for the entire group project. Your tutor may make adjustment to this marking criterion based on practical situations.

Project description:

In this assignment, a team of 5 to 7 students will create a cross-language plagiarism detection tool.

As a minimum requirement, the system should provide the following functions:

- User management (keep track of users, who log in using username/password).
- Document management (store and keep track of documents and link them to users).
- Allow the user to provide a plain text file containing an article written in English.
- Allow the user to select at least one target language other than English.
- The tool will search the Internet for similar articles writing in English or in the target language.

- Report the degree of similarity in terms of percentage.
- Highlight the similarities between the two files.

The system can be developed in any programming language and database that are available in your lab, so that you can demonstrate your system to your tutor in the lab. Furthermore, you are allowed to use any existing software components including, for example, open source software and web services/APIs such as Microsoft Translator Text API and Yandex Translate API. However, you must explicitly declare which part is your own work and which part is taken from other people's work (declare at the very start of your final report), or else it is plagiarism.

In addition to the final report file and final presentation file, the submitted external storage should contain the source code (**with at least 1/3 comments**) and executable code of the software you developed, screenshots, test data and results, and any other documents you wish to include such as a readme file.

Marking criteria:

1. Progress report: **1 mark**
2. Final project presentation: **1 mark**
3. An intensive literature review and analysis of related technologies, tools and services. **5 marks**
4. Project management (project and activity planning, progress and controlling, effort estimation, risk analysis and measures, meeting records, degree of success of the project, etc). **7 marks**

Note (1): You must include a project charter and a project diary. A project charter should include at least the project's title and date of authorization, the project manager's information (group representative or all team members), a summary schedule, a summary of budget (if applicable), project objectives, project success criteria, a summary of the planned approach for managing the project, roles and responsibilities. In real-life projects, it should be reviewed by all project stakeholders---therefore, you should include a list of stakeholders.

Note (2): You can use project management tools such as Microsoft Project, but it is not compulsory.

Note (3): Tutors may assess your project management quality not only based on your report but also based on their weekly observations of your progress in the lab.

5. Requirements analysis and specification, and software design. **6 marks**
6. Implementation (quality of code, fulfilment of functional requirements, soundness of solution, consistency with design, etc). **10 marks**

Note: You may include additional features (upon user agreement) if the basic functional requirements are fulfilled.

7. Testing (test plan, test cases, test executions and test results): **5 marks**
8. Usability and user interface: **5 marks**

FAQ 1: What is the format of the project report?

Answer: You decide. Your report needs to address the above marking criteria.

FAQ 2: How many test cases should we design?

Answer: You decide, and justify your decision in your report. You should adopt a black-box or white-box test adequacy criterion.

FAQ 3: What should we include in the softcopy of the final submission?

Answer: Anything that you consider necessary to include. At least, the following should be included: your source code, executable code, test cases and test results, and a readme file showing the screenshots

of successful executions of your tool. You need to provide evidence to show that your tool can execute successfully. An example of such evidence is that, once you collected the outputs, you manually verify each output and then report whether or not they are correct.

FAQ 4: The functional requirements given in this document are a bit vague ...

Answer: This is to make your project more like a real-world one where the users might not be very clear about what they wanted at the very start of the project. Each lab provides you with an opportunity to interview your user (tutor) to understand what they really want. You are encouraged to come to your user with a prototype interface so that your discussions will be more concrete.

Please do NOT send emails to your users (tutors/lecturers) to clarify the project requirements, but instead you should consult them during the labs.