

# CS4014/CS4065/ET4243 Project Description

06 February 2017

## 1. Introduction

This is an open source project that aims to produce an interactive web platform to facilitate the proofreading of student theses, dissertations, assignments, research papers alike among students and staff. The main idea behind the website is to allow students to publish their academic documents and get them proofread/reviewed by peers.

**You are required to make the source code available via Github or Bitbucket, including the database schemas (but excluding any test data embedded within the database schema).**

In Section 2 below, the ideal setup for the project is described in detail. However, the project groups should identify and implement the core-functionality first, followed by any additional features.

## 2. Project Overview

- User roles:
  - Two user roles desired: Students and Moderators
- Landing page:
  - Initially, the website should display a landing page requesting users to register or login to use the system. None of the (proofreading/review) tasks should be displayed until a user is logged in
- User registration/sign-up
  - At least the following profile information should be collected during the user-sign up process:
    - First Name
    - Last Name
    - Student or Staff ID
    - email
    - Major subject stream/discipline (select from a pre-populated list)
    - Password and Re-enter password
  - Only emails from specified domain(s) should be allowed during the sign-up (e.g. emails from ul.ie)
- Create tasks
  - Registered students should be able to create (proofreading/review) tasks
  - When creating a task, at least the following information should be collected:

- Task title
- Task type (eg. MSc thesis, BSc dissertation, project report, PhD thesis, Assignment, Conference Research Paper etc.)
- Brief description of the task
- Tags to describe the task (e.g. computer, html, project-report, cs4014)
  - **Maximum 4 tags allowed per task. This is an essential feature.**
- Number of pages in the document
- Number of words in the document
- Source file format (e.g. specify .docx, doc, open office, tex, pdf)
- Sample of the document (e.g. three random pages from the thesis as a pdf) for preview purpose
- Deadlines:
  - Deadline for claiming the task: task will be automatically unpublished after this date and time (i.e. the task will no longer appear in the website after this date/time, then the user may either create a new task or re-publish the task with a new claim date).
  - Deadline for task completion/submission (this date is the date that you wish to receive the proofread/reviewed document)
  - The above set up gives the task owner a reasonable timeframe to see whether anyone is interested in claiming the task; if not they can look somewhere else for a potential reviewer.
- Task list/stream
  - **Registered students should be able to browse available/unclaimed tasks published by the other students. A page should display a list of tasks best suited for the logged in user (e.g. tasks from the same discipline, user's favourite tags etc., user's subscribed tags). Ideally, try to identify/learn the characteristics of the most suitable tasks for the user from user's browsing habits of the website.**
  - Tasks with the task claim deadline closest to the current date should appear first.
- Task details
  - Registered users should be able to click on a task to view more details (such as associated tags, description, number of pages, numbers words etc.) about the task
  - User should be able to download the preview document attached to the task
- Task claim
  - After viewing the details of a task, a user should be able to claim the task. Once someone claims a task, that task should disappear from the task list/stream (so that the same task cannot be claimed by two users).

- User Reputation
    - For each task claimed, the user should be awarded 10 marks to the user's reputation score
- Flagging tasks
  - Any registered user should be able to flag a task as inappropriate
  - User Reputation
    - When a user flags a task as inappropriate, the user should be awarded 2 marks towards the reputation score
- Claimed tasks (for task claimants)
  - If the logged in user has claimed tasks, they should be able to view a list of claimed tasks, sorted by the task's completion deadline (task with the deadlines coming up soon should appear first)
  - Clicking on a claimed task should provide the following options:
    - Full file request
      - Display a personalised email template requesting the task owner to send the full document for review (under no other circumstances should the system display other users' profile information, including emails due to privacy concerns).
    - Task completion (mark as complete)
      - System should allow a task claimant to mark the completion of a certain task (e.g. by proving a brief textual review)
    - Task cancellation
      - Task claimants are allowed to cancel tasks at any stage, but their reputation score should be reduced by 15 marks
    - Failed submission
      - If the task claimant fails to submit a task before the task's submission deadline, the status of the task should be changed to cancelled and a penalty of 30 marks should be deducted from the claimant's reputation score
- My tasks (task owners)
  - If the logged in user has created any tasks, the user should be able to retrieve a list of created tasks, with their current status: pending claim, unclaimed (task claim deadline expired), claimed, cancelled (by the claimant) or completed.
  - Task owner should be able to view the email address of the claimant (in addition to claimant's first name and the last name).
  - Reviewer rating
    - Task owners should be able to provide feedback about the task claimant for each of the completed tasks, with simply two options: Happy (with their work/review), Not happy (with their work/review)

- If chosen
    - 'Happy', 5 marks will be added towards the claimant's reputation
    - 'Not happy', 5 marks will be deducted from the claimant's reputation
- When a user gets a reputation score of 40 or more, the user should be automatically promoted as a moderator
- Moderators role:
  - Access flagged tasks
    - Moderators should be able to access a list of 'FLAGGED TASKS'
  - Un-publish task
    - Moderators should be able to immediately un-publish flagged tasks (after verifying the task details)
  - Ban users
    - Moderators should be able to ban users who created any of the flagged tasks; the banned users should never be allowed to login or create account with the same email address.
- **You are required to populate your website with:**
  - **at least 80 tasks (covering different test cases)**
  - **at least 20 unique tags**
  - **at least 20 different users**
- Extra features (not essential)
  - Ability for users to edit their profile information (e.g. change email, password)
  - Ability for users to delete their profiles (what should happen to any claimed tasks by the user?)
  - Ability to nominate potential reviewers (so the task stream would get adjusted for those reviewers)
  - Ability to search tasks (for title, descriptions)
  - Also viewed feature: Users who view this task also viewed ...
  - Ability for users to subscribe to a number of tags (once subscribed, the task stream should adjust according to the subscribed tags)
  - Automatic tag completion
  - Login security, Email verification
  - Implement Recaptcha (I'm not a robot) for forms to prevent spamming
  - FAQ page/help/instruction pages

- Localisation: Support for other languages (i.e. no hardcoded strings within in PHP)
- Allow users to upload the full document, and claimants to download the full documents when claiming a task
- Notification email support

The web site can be implemented in any programming language/technology of your choice, but only PHP and MySQL will be supported by the module and staff. That is, accounts on web servers and database servers will be provided for PHP/MySQL and help will be available on all aspects of PHP and MySQL at bi-weekly meetings, and practicals will run through to the end of semester.

### 3. Deadlines and Deliverables

#### 3.1 Deliverable 1: Design (30%)

- Due Friday 5PM, week 6  
All database tables
- List of all major processes
- Flowcharts
- Mock ups of main pages
- Submit one document (PDF only) with everything in it to course module website (no email submissions accepted)

#### 3.2 Deliverable 2: Database Implementation (5%)

- Due Friday 5PM, week 7.
- All database tables defined on database server
- Submit i) one document (PDF) with the final tables and ii) link to the database schema in the Bitbucket/Github repository

#### 3.3 Deliverable 3: Prototype (5%)

- Due during weekly meeting week 9 / 10
- Most functionality should be operational
- Submit report (PDF) detailing the status of each major process from Deliverable 1

#### 3.4 Deliverable 4: Final Implementation (50%)

- Due Friday 5PM, week 11
- Include a brief report with
  - Link to the Github/Bitbucket repository

- Description of all functionality
- Final Database tables
- All HTML pages/PHP scripts
- List of copied materials and resources

### 3.5 Deliverable 5: Final Demo

- Some time in week 12 (possibly 13)
- Testing will include
  - All core functionality
  - Source code (coding styles/variable naming, PSR2 compliance, comments)
  - Any “extras”
  - In-situ edits

### 3.6 Participation (10%)

- Graded throughout the semester
- Team members take turns in leading meetings
- Github/Bitbucket commits

## 4. Proportion of the work

**Starting in Week 5, each week, a brief report must be filled out (an example will be made available through the course module website) outlining what work was done, what will be done in the following week, who is responsible for each part and what proportion of the total work for that week each person did.**

If the work is always shared equally, then each person will be given a 25% share. Each week, this must be emailed to Asanka.Wasala@ul.ie using the following subject line:

**Subject: [CS4014] [Week X] [Group Y] Progress**

**Where X is the week number and Y your group number. This must be sent every week, regardless of whether or not there is a deliverable due, plus, a copy should be submitted to the course module website.**

You should always have a copy of this report at each group meeting, signed by each group member. **These mails will be processed by a mail filter, so please make sure you use the proper format, i.e. exactly as described. Failure to send in the mail properly will result in a late penalty (deducted from participation), although each group is allowed to send one badly formatted mail without penalty.**

There will also have to be a report like this submitted in week 12, giving an overall contribution. This will carry extra weight, so can help identify people who didn't get credit for work early on.

## 5. Group Marking

All group projects suffer from the credit assignment problem, that is, how to fairly reflect the work each member put into the project. The proportion of work each person did will be an average of all the reports handed in, with the final one counting for three times as much.

Thus, the average contribution that each person makes can be calculated by:  $(W5+W6+...W11+(W12*3))/10$  where  $Wx$  refers to Week  $x$ . In the case where everyone did 25% of the work all the time, everyone will get the same mark. However, where someone did more, they will get a higher proportion of the total marks.

At the end of the semester, the total marks will be calculated on a per-group basis, and then modified on an individual basis so that anyone who did less than 25% gets less, while anyone who did more gets a higher mark.

### 5.1 Retrospective Marking

There can be no retrospective marking. That is, once the proportions are handed up and agreed to, they cannot be changed. If you believe you have a problem with your group, it is crucial that you report it immediately.

## 6. Project Marking

The exact breakdown won't be made available, but the final project will be graded on the following:

- Completeness
- Core functionality – Does the site implements the core functionality as specified in the project overview?
- Additional functionality – Is there evidence that the group tried to add value to the project? Or did they just do the bare minimum?
- Look and Feel – Is the site good to use?

## 7. Plagiarism

It is acceptable to use images from the web, but in your final report you must list where each item came from. This must be done for every item you take from somewhere else. The following counts as plagiarism:

- Copying anything without identifying it and its source in the final report
- Copying any sort of logos
- Copying any code

The penalty from plagiarism varies according to the severity, but the minimum penalty will be zero for the deliverable in which the plagiarised item appears. It is the responsibility of everyone in the group to ensure that something isn't accidentally plagiarised. If someone in your group illegally copies something everyone in the group will be penalised.

## 8. Meetings

**Bi-weekly meetings with Asanka will start in Week 7; and in the first meeting we will go through the design. Each group will have a meeting (with just them) every week. You will be expected to demonstrate your progress, but will also have an opportunity to ask technical questions. The schedule for the meetings will be made available in Week 4.**

If your group needs an extra meeting for any reason, request an appointment through the discussion forum in the course module website, we will arrange one as soon as possible.

## 9. Advice

Group work like this can be fun and rewarding. However, it can also be frustrating and enraging. To maximize the quality of your experience, please heed the following advice:

- Respect your group; always turn up for meetings, both those with Asanka and those with just the group.
- Be honest with your group. If you genuinely didn't do something in a particular week, admit it; a smaller share of the grade in one week won't impact your grade significantly, but not telling the group that something isn't done can impact everyone.
- Keep Asanka informed. If there are any problems, it is important to get them sorted out as soon as possible.
- Keep informed. The deadlines are subject to change. We don't plan on changing any, but some may be pushed back due to unforeseen circumstances. It is possible that the only way in which you will hear about this is through the course module website, so make sure you check it at least once a week.
- Get the mail subjects right. If you use the wrong subject line you risk not getting credit for the work you did. Don't leave all the responsibility to one person; whoever mails in the reports should copy the other group members on the mail.