### 1. Introduction

Document purpose: This is a Requirements Specification document for an academic misconduct system for ATOM University (ATOM). The new system will upgrade the current system to provide a more standardized and flexible approach to the process to control academic misconduct in assessments by students. This document describes the scope, objectives and goal of the new system. In addition to describing non-functional requirements, this document models the functional requirements with use cases, interaction diagrams, and class models. This document is intended to direct the design and implementation of the target system.

# 1.1 Initial team management

29/01/21 – Large Group Meeting 1 (G.Browning, R.Chawla, H.Keetch, G.Chilingaryan, M.Ye)

Roles given out to attendants of meeting and github setup.

02/02/21 – Large group Meeting 2 (G.Browning, R.Chawla, H.Keetch, G.Chilingaryan)

Collated requirements analysis and discussed following roles (Use case).

09/02/21 – Large Group Meeting 3 (G.Browning, R.Chawla, H.Keetch, G.Chilingaryan)

Finalized requirements analysis document and started working on the use case diagram.

12/02/21 - Large Group Meeting 4 (G.Browning, R.Chawla, H.Keetch, G.Chilingaryan)

Created use case diagram and discussed use case desciptions rôle assignment.

17/02/21 – Pairing Meeting 1 - (R.Chawla, H.Keetch)

Produced use case desciptions for the use case diagram.

21/02/21 – Pairing Meeting 2 - (F.Ahmed, G.Chilingaryan)

Started class diagrams.

24/02/21 - Large Group Meeting 5 (G.Browning, R.Chawla, H.Keetch, G.Chilingaryan, F.Ahmed)

Finalised use case diagram, descriptions.

25/02/21 - Pairing Meeting 3 (G.Browning, H.Keetch)

Collated team management data in the first report.

25/02/21 – Pairing Meeting 4 - (F.Ahmed, G.Chilingaryan)

Finalised class diagrams.

26/02/21 - Large Group Meeting 6 (G.Browning, R.Chawla, H.Keetch, G.Chilingaryan, F.Ahmed)

Finalised first report for 01/03/21

Fahim Ahmed did not attend initial meetings as the team forgot to get back in contact after they asked to be added to the team’s group chat.

Mingshen Ye did not attend nor contribute to anything in the project other than attending the first meeting

# 1.2 Background

ATOM University is formed by different academic departments distributed among different faculties.

At the department level, there is an Academic Misconduct team and a Professional Services team that execute the process for dealing with academic misconduct. Some departments have some automation to control such processes, but others don’t.

There is a central office - Student Conduct Office (SCO), which defines this process and that keeps records of all the misconduct from all departments.

Each department offers modules for students enrolled on specific programmes. Each module has a code, a title, a module leader, lecturers, number of credits and if it is mandatory or optional depending on the programme that the student is enrolled on.

Problems with the current system include:  
- There isn’t a standardized process among the different academic departments as currently each department has its own process  
- The current system isn’t flexible enough to represent the dynamic nature of the misconduct process

# 1.3 System Purpose

## 1.3.1 Stakeholders

Those who will primarily benefit from the new system and those who will be affected by the new system include:

* Students of ATOM University: Due to the standardized process being implemented, students are likely to get judgments on whether academic misconduct was committed faster and more fairly

- Student Conduct Office:

The SCO can more accurately and easily keep track of misconduct cases with the new system, as well as the state of each case

- Lecturers / module leaders

Lecturers will find it easier to declare suspected cases of academic misconduct and keep track of which of their students are currently under investigation

- Department academic misconduct teams

There will be a universal system for each Department academic misconduct team to work with and monitor all the academic misconduct cases that students have in the corresponding department.

- Professional Services team

The Professional Services team will have a chance to get a more informative feedback regarding the student’s academic misconduct case, thus helping the Professional Services team to give a proper solution to the addressed academic misconduct.

* Student Conduct and Appeals
* The SCA can easily schedule hearings with the knowledge of which students need a hearing scheduled

## 1.3.2 Responsibilities

The primary responsibilities of the new system:

- provide a standardized way of lecturers/module leaders declaring a suspected case of academic misconduct by a student during an assessment

- provide a standardized way of processing an academic misconduct case

- provide a standardized way to monitor the progress of the reported academic misconduct cases

- provide the customers direct access to the up-to-date information regarding all the cases that have been reported and are currently pending

- establish a flexible communication between SCO, Department academic misconduct teams, Student Conduct and Appeals team and Professional Services team to share any information concerning the corresponding academic misconduct case

The system will not be responsible for making a judgment based on the evidence of misconduct, this will be done by a human.

## 1.3.3 Need

This system is needed in order to control academic misconduct in assessments by the students. Replacement of the current system will eliminate the lack of some departments in having an automated system to control such processes and will share its availability throughout all the departments and academic misconduct teams.

### Functional Requirements

The Academic Misconduct process defined by SCO can be found in the coursework specification. We can build a base set of requirements from what the stakeholders have asked for the system to have.

They have asked for a system that automates a process. This process is dealing with academic misconduct. So, the inputs for this process would be the details of what a student has done and then the process will produce an output of what the result of this action is.

1. Create a system that can execute the process of dealing with academic misconduct.
2. The system shall be accessed by all departments of ATOM University.
3. Allow for users to input details including what academic misconduct the specified student may have performed.
4. Produce an output for what action is to be taken regarding a student’s academic misconduct.
5. All actions taken during the process should be logged with time stamps and the user who performed them, to a guarantee security and compliance.

SCO has also defined a set of actions to be taken depending on what misconduct a student has performed. These are to be used as the outputs for each student within the system. The system should be able to figure out, using this specification, what action will be taken.

1. The output produced should follow the guidelines of how academic misconduct is carried out.
2. The system should use the guidelines to calculate each action to be taken.

SCO has stated that each module contains the details: a code, a title. a module leader, lecturers, number of credits, if it is mandatory or optional depending on the program the student is in. so these will be used when filling in the details of a student and their module.

1. Each module should have a code assigned.
2. Each module should have a title assigned.
3. Each module should have a module leader assigned.
4. Each module should have lecturer(s) assigned.
5. Each module should have a number of credits assigned.
6. Each module should have a status assigned of mandatory or optional depending on the program a student is in.

SCO has a specific format for each report produced by a module lecturer or module leader. The specification is as follows:

Module code, academic year, term

Student number, name and email

Type of misconduct-collusion-3rd party involvement

Title of assessment affected, % of marks that affects the total mark of module

Anonymized evidence

Using this specification as inputs, by the module lecturer or module leader, and/or information on the student the system should be able to decide what action is to be taken.

1. A module leader and module lecturer should be able to input student academic misconduct information in the SCO report format.
2. The system should create a record on a student if they are reported for the first time.
3. The student record should contain the information of what misconduct a student has carried out.
4. The SCO should keep records of all the misconducts from all departments.

SCO has also asked that all the actions taken during the process should be logged with time stamps and the user who perfumed them to guarantee security and compliance.

1. When a module lecturer or module leader is to submit a report, they should also be asked of their details so that they can be referred to at a later point.
2. The information on a module lecturer or module leader should be attached to the report that they made on a student.

SCO requires for the academic misconduct team to evaluate the evidence provided in a report so that they can verify it.

1. The system should send this report to the academic misconduct team in some way (email or on system).
2. Member(s) of the academic misconduct should have the ability to change the status on the case report using evidence sent from the case report.
3. If there is enough evidence, then the system should continue processing a report.
4. If there is not enough evidence, then the system should forward to the “home” department of the programme the specified student is a member of.
5. If the report is sent to the “home” department, the system should notify the Academic misconduct team of that “home” department.

SCO has specified requirements for what is to be carried out based on the situation of a report and the student’s previous actions of misconduct if they have any.

1. If it is verified that there are previous offences at the college level (SCO) and there are no previous offences and it is 3rd party involvement in the authorship of work, an investigatory interview is scheduled by the system with the module leader and a member of the misconduct team.
2. The member of the misconduct team should be notified with at least 7 days notice of the investigatory interview meeting.
3. An invitation should be sent to the student of the investigatory interview meeting that concerns them.
4. If there are no previous offences of the specified student but it is any other case, a local academic misconduct procedure interview is scheduled with the module leader of the misconduct team.
5. The member of the misconduct team should be notified with at least 7 days notice of the local academic procedure interview meeting.
6. An invitation should be sent to the student of the local academic procedure interview meeting that concerns them.
7. If there are no previous offences, an email should be sent to the module leader asking for a description of the case.

SCO has listed that they already have a pre-existing API. This should be considered when developing the project.

1. The system should integrate the pre-existing API fully with the system to be developed.

### Non-Functional Requirements

# 3.1 Reliability

- The system should be completely operational for every user.

- The system should be available to user depending on their role within the system.

# 3.2 Usability

- A user should be able to use the system during the business week (Monday-Friday 9am-5pm BST).

* A user should be able to locate and retrieve the desired information from the system.

# 3.3 Performance

- The system should be able to store a large amount of data without reducing its performance.

- The system should be able to support simultaneous users without reducing its performance.

# 3.4 Security

- The system should provide password protected access for all users.

* The information that is shared between academic misconduct teams should be protected.
* No unauthorised users should be allowed to access the system.
* Data should be stored securely.
* Users should not be allowed to access parts of the system they aren’t authorised to.