

# ISYS1118 Assignment 2 Requirements

## Group Members

Name	Email
Elliot Schot	s3530160@student.rmit.edu.au
Sreeja Manikyam	s3705865@student.rmit.edu.au
Alex Shen	s3607881@student.rmit.edu.au
Qinghua Mai	s3574846@student.rmit.edu.au

SRS Assignment 2 changes
Added 3 more functional requirements as per requested
Added Assignment 2 Notes
Added code work table
Updated use case diagram to match requested functions

## Assignment 2 Notes:

- See README for more info
- Our code is incomplete and not functional as a whole program, each method will need to be executed in a specific way. Bellow is a breakdown of our methods and the current issues, and how to run said code

Code work table			
Method	Code Area	Notes	Author
GUI	com.xphir.rmit.gui	50% of the program have finished. Including the Login page , the dashboard and a table of task in the "VIEW TASKS" selection. I made two versions updated the RMIT HR GUI system. After the group discussion, we decided to cancel the reset button(use	Michael (Qinghua Mai)

		<p>to reset the login password) and two radio button in the login page. The two radio button was use to select which role is trying to login in the system. In the version 2.0 i used some code to analyse the substring of the user id to identify who is trying to login the system. (CC for course coordinator and AP for approver) <b>To test the code with ID (CC3574846 or AP3574846) and password(1234) for both of them.</b> The dashboard clearly show the ID and name of the user , two selections and news of today.</p>	
Import Data	com.xphir.rmit.HRSystem.CodeDump.txt	<p>Currently not functional as there was bugs, code had to be placed in CodeDump.txt as it caused issues for the whole class.</p> <p>Workaround is done by hard coding data initialisation</p>	Elliot
Export Data	com.xphir.rmit.HRSystem.CodeDump.txt	See above	Elliot
Password Login	com.xphir.rmit.HRSystem.Main.Login()	<p>Code works 90% within com.xphir.rmit.HRSystem.Main.Login() - Called in main</p> <p>Currently doesn't seem to hash the password the user enters successfully. I believe this is due to a scanner bugg (eg it adds an extra character or so on)</p>	Elliot
Create/Edit/Delete/View Tasks	com.xphir.rmit.assignment.Task.java	<p>The code works up to 95%. The class Task.java has a main() method which creates an object for the class and calls all methods for execution.</p>	Sreeja

View All Tasks	com.xphir.rmit.assignment.Task.java	Same as above	Sreeja
View All Courses	com.xphir.rmit.assignment.TaskArea.java	The class TaskArea currently does not have a main() method. The function disp() contains the code to display the details of schools, departments and courses.	Sreeja
Create/Edit/Delete/View Casual Staff	com.xphir.rmit.assignment.CasualStaff.java & com.xphir.rmit.assignment.DashboardFilter.java	All functions are accessed via Casual Staff Menu which is implemented in Dashboard Filter which is the main method. Within the Menu when editing and creating etc. There are sub-menus. Input validation is available. The format for Casual staff detail entry is not strict. Only the email address must include '.com' other fields such as name, id etc doesn't have a strict format.	Alex
View All Staff	com.xphir.rmit.assignment.DashboardFilter.java	Viewing all staff isn't limited by the access level (yet). Meaning all user that accesses the system can view the staff.	Alex

Added functional requirements as per requested

1. View casual staff profile - Assignment 2 added scope
2. Edit casual staff profile - Assignment 2 added scope
3. Update pay rate - Assignment 2 added scope

### Assignment 1 content starts here:

com.xphir.rmit.assignment

Create/Edit/Delete/View Tasks (Sreeja)  
View All Tasks (Sreeja)  
View All Courses (Sreeja)  
Create/Edit/Delete/View Casual Staff (Alex)  
View All Staff (Alex)  
Console Menu (Elliot)

Requirements are based off information given in the following areas.

- Interview 1 recording
- Interview 2 recording

- Previous Requirements Drafts (found in Zip file)
- Our interpretation from said requirements
- Discussions with our tutor [Mohammad.Haqqani@rmit.edu.au]

#### Documents Attached

- Use Case Diagram (See "UML Diagram.pdf")
- Class Diagram (See "UML Diagram.pdf")
- Object Diagram (See "UML Diagram.pdf")
- Interview 1 Recording (See Interview Folder)
- Interview 2 Recording (See Interview Folder)
- Draft Work (See Draft Work Folder)
- Zip file of Code

#### Our Code Methods are as follows

- Create Task - Sreeja
- Edit Task - Alex
- Delete Task - Sreeja
- Options Menu and Linking code - Elliot

#### Supplied Brief:

##### **Project: RMIT Casual Allocation/HR Management System**

*You are required to design and develop a HR System for RMIT casual worker. Here is a general and brief specification (just for the start) of the project since you have to write and make your own requirement and project scope and specification. This system has multiple users/actors such as admins, course coordinator, approvals and casual staff. Each actor can have access to their own functions, however some functions shared between group of users. The main purpose of this application is manage hired casual staff, allocate them through the courses/timetable, working hours and make relevant data for the payroll. All users must log in with their own username and password and can have access to their own menu. For example, casual staff can log in, see offers and applications. You can do some researches about HR management system before coming to the interview to have better knowledge about this domain and your client. However, your project requirement must be based on your interview sessions with Ms. Boogie Baslan who is the client with actual requirements. You must gather your requirements based on your interviews with the client. You supposed to show your requirement to her in week 4 and discuss more about your questionnaires and requirements. You can write your own assumptions; however, it would be better if you can get client approval at week 4.*

#### **Purpose:**

To assign tasks to casual staff and keep track of their workload and also to keep track of the costs. With tasks being assigned only if a casual staff member has met its requirements.

Allowing HR staff to easily allocate the tasks and subsequently generate the reports and payroll based on the task information.

**Product scope:**

- The functionalities for casual staff doesn't exist
- HR staff can login using their username and password
- Tasks can be maintained by Course Coordinators, Approvers and Administrators but to their area of management
- Checking costs and load is limited to Approvers
- Maintaining the payroll is limited to Administrators
- Access to the functionalities will be filtered based on the HR Staff area of management

**Product perspective:**

- Focuses on HR Staff
- Implements Payroll exports to an external SAP system
- Reports are generated to catch outliers (overworked staff, high cost courses)
- Casual staff details are pre-existing ones

**Assumptions:**

- Users input correct data types
- Users of the system have no malicious intentions
- Casual staff data is presupplied in JSON format with accurate information
- HR Agents data is presupplied in JSON format with accurate information
- Payroll export will be a layout we decide on (CSV format)
- Reports will be on screen with no filter or sorting

**Key Terms**

Areas of management	This refers to the area that a HR agent is given under access areas. For example if the agent is given management of the department of IT they would manage all courses within that department.
Tasks	Also known as activities Tasks are they activities/work that require Casual Staff, they can be marking, tutorial, lecture etc
HR Agents	Are made up of the HR workers who interact with the system (Administrators, Approver, Course Coordinators)
Casual Staff	Are the staff assigned to complete/work on tasks (they are not actors within the system)

**Tasks**

- Tasks contain the following values

- The type of task (calendar based, eg. lecture, or non calendar based, eg. marking)
- The length of the task (eg. 2 hours)
- The title of the task (eg. Lecture01)
- The course code of the task (eg. "COSC2627")
- The department of the task (eg. "Computer Science")
- The school of the task (eg. "School of Science")
- The location of the task (if applicable - applies to calendar based tasks)
- The time + date of the task (if applicable - applies to calendar based tasks)
- The start date of the task (eg. start of semester, or start of marking period)
- The end date of the task (or end of semester, or end of marking period)
- The requirements of the task (For example "COSC2627-Lecture" or "COSC2627-All")
- Who is assigned to the task (null if no one is assigned)
- Notes on said tasks
- Tasks can
  - Be created Individually
  - Be viewed overall (view all tasks within your management area)
  - Be edited
  - Be deleted
  - Be imported/created via CSV on mass
  - Be viewed in detail
  - Have casual staff (who match the task requirements) mass allocated to tasks
  - Have casual staff individually allocated to tasks (those who match the task requirements)

## HR Agents

- The HR Agents are Administrators, Approver, Course Coordinators (the actors)
- HR Agents have the following values
  - First Name
  - Last Name
  - Email Address
  - Password
  - Agent Type (eg. Administrator, Approver, Coordinator)
  - Access Areas (eg. COSC2627, COSC1204, School of Science)
- Administrators manage at the School level (eg "School of Science")
- Approvers Manage at the Department level (eg. "Computer science")
- Course Coordinators manage at the Course level (eg. "COSC2627")
- Note: Schools contain Departments, Departments contain Courses. So a Administrator of the School of Science, can manage tasks within the Departments, and Courses it contains.
- HR Agents can only manage tasks within their areas (note Agents may manage multiple areas, for example a Course Coordinator could manage "COSC2627" and "COSC1204")
- Agents can
  - Manage tasks within their areas of management

- View reports within their areas of management
- HR Agents are allocated based on their login credentials

### **Casual Staff**

- Casual staff in our system are not Actors, they are just an Object (matching a real person who doesn't interact with the system)
- Casual staff contain the following values
  - First Name
  - Last Name
  - Title (eg, Mr. or Dr.)
  - Email Address
  - Task Qualifications (Areas they can take tasks in, eg. "COSC2627-Marking" which will enable to be applicable for any tasks with the requirement COS2627-Marking)
- For the sake of simplicity we will use a preexisting casual staff database/list

### **Reports**

- Can be executed/accessed by Approvers only
- CheckLoad Report based on the agents management area (eg. an Approver is given load totals to all casual staff with Tasks Qualifications within their area)
  - This report is designed to show how many work hours a casual staff member has during a week, to see if their workload is to high
  - Staff ID
  - Staff Title
  - Weekly work hours (Total)
  - Number of assigned tasks
- CheckCost Report based on the agents management area (eg. an Approver is given cost totals for all casual staff within their area of management) Report contains the following
  - This report is designed to show the wage costs of courses, departments, and schools for use when budgeting.
  - Staff ID
  - Staff Title
  - Hourly Wage
  - Weekly working hours
  - Course
  - Department (Course Grouped into Department)
  - Total course cost
  - Total department cost
  - Total school cost

### **Payroll**

- Can be executed/accessed by Administrators only
- Exports a CSV with the following values
  - Staff name

- Staff Title
- Email Address
- Wage
- Hours
- Total Pay

### **Functional Requirements**

1. Create single task
2. Mass create tasks (via data import)
3. General View of Tasks (view all tasks)
4. Filtered View of Tasks
5. View only a single task
6. Edit Tasks
7. Delete Task
8. Allocate single Casual Staff to Task
9. Mass allocate casual staff to tasks
10. Generate CheckLoad report
11. Generate CheckCost report
12. Restrict report to agents area of management
13. Generate payroll export
14. Payroll can be executed/seen by Administrators only
15. HR Agents login to the system with a username and password
16. View casual staff profile - Assignment 2 added scope
17. Edit casual staff profile - Assignment 2 added scope
18. Update pay rate - Assignment 2 added scope

### **Non-Functional Requirements**

1. Reports must be generated in under 10 seconds
2. All main functions (tasks, reports, payroll) are accessible via a main dashboard
3. Payroll export will be in a csv format
4. Task import will be in a csv format





