

# UniLEARN

User Stories, Analysis & Modelling

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## User Stories

This section details key user stories to be implemented in the Unilearn application.

Name	Student submits Assignment Submission
Trigger	Student wishes to submit their assignment submission for assessment.
Script	<p>Student selects to view the details / submission page for the Assignment.</p> <p>Submission screen is presented with area to upload file(s).</p> <p>Student adds files which are uploaded for their review prior to submission. Student enters comments.</p> <p>Student presses the submit button to complete their assignment submission.</p> <p>The Student is advised by the system that their submission has been successful. An electronic receipt is provided to the Student. If the submission does not meet the requirements defined for the assignment (e.g. missing files) the Student is advised of the problem and the submission is not completed. The Student may then correct the problem.</p>

Name	Student views their Assignment Results
Trigger	Student wishes to know the result for their assignment submission.
Script	<p>Student selects a unit of study from the list of available units. A summary of assignments is presented.</p> <p>Student selects an assignment. The details for this assignment, including their results are presented.</p>
Notes	A Marker must have assessed the submission for the result to be presented, otherwise 'Result Pending' will be shown.

Name	Unit Convenor creates a new Assignment
Trigger	Unit Convenor wishes to create a new assignment.
Script	<p>System prompts the Unit Convenor for the following:</p> <ul style="list-style-type: none"><li>• Unit of Study</li><li>• Assignment Title</li><li>• Publish Date, Due Date</li><li>• Late Penalty parameters</li><li>• Description</li><li>• Files (such as Assignment Sheet)</li></ul>

	<ul style="list-style-type: none"> <li>Results Template</li> </ul> <p>Unit Convenor enters the required information and either creates the Assignment, saves the Assignment as a draft or cancels the creation of the Assignment.</p>
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Name	Marker enters results for a Student's Assignment Submission
Trigger	Marker wishes to assess a Student's Submission
Script	<p>Marker selects the Unit of Study and is presented with a list of students and their assignment results (or other assignment status e.g. not submitted). The Marker opts to upload the mark for that student's submission. The Marker is presented with the assignment results template which they fill in.</p> <p>The Marker saves / cancels the result.</p>
Notes	The Marker has a copy of the student's submission files. When the Unit Convenor assigns a student's submission to the Marker for marking the Marker receives an email alert. The Marker can then access the student's submission files from the UniLearn system. Only the submissions allocated to the Marker can be seen from their UniLearn portal.

Name	Unit Convenor views a Student's Assignment Results for a Unit of Study
Trigger	The Unit Convenor wishes to view the student's results.
Script	<p>System presents a list of units of study. Unit Convenor selects a unit of study from the available list.</p> <p>System presents a list of students in the unit of study. Unit Convenor selects a study from the list.</p> <p>System presents a report showing the results for each submission for this student in the unit of study.</p> <p>Unit Convenor views the report online or prints it.</p>

Name	Administrator creates a new Unit of Study
Trigger	A new unit of study is required in the system to allow assignments to be created.
Script	<p>System prompts the administrator for a code and name for the unit of study. Administrator enters the required details.</p> <p>System prompts the administrator to add a Unit Convenor, Markers and Students to the Unit of Study. Administrator selects the appropriate actors from lists.</p> <p>Administrator creates the Unit of Study, cancels its creation or saves it as a draft.</p>
	All actors (e.g. Unit Convenors, Students) must exist in the system before they can be added to a unit of study.

Name	Supervisor views Results for a Student across all Units of Study
Trigger	The Supervisor has selected a student and wishes to view their results.
Script	The Student Results report is presented showing the results for all assignments for this student. The user may filter this list to show all or one Unit of Study. The user may save this report as a PDF or print it.

Name	Student receives an Alert to indicate a new Assignment is available
Trigger	Lecturers have uploaded the new assignment in the system and flag it to alert all enrolled student.
Script	System sent email to all enrolled student in the unit and inform there is a new assignment has published  Student login email account by provide validated account ID and PIN  Check email

Name	Marker updates Assignment Result for a Student
Trigger	Marker wishes to assess a student's submission
Script	Marker selects the Unit of Study and is presented with a list of the students assigned to them by the Unit Convenor. The marker is presented with the assignment results (or other assignment status e.g. not submitted) for each student. The Marker selects the grid cell for the student / assignment and updates their result. The Marker may also enter comments or use the results template to enter additional details.  The Marker saves / cancels the result. The Marker is warned that they are overwriting an existing result.
Notes	The Marker has a copy of the student's submission files. A Result has already been recorded for this student's assignment submission.

Name	Unit Convenor allocates Assignments to Markers for assessment.
Trigger	The Unit Convenor wishes to assign submissions to Markers for assessment.
Script	Unit Convenor selects the Unit of Study and is presented with a list of students and their assignment results (or other assignment status e.g. not submitted). The Unit Convenor selects one (or a group of) student / assignment submission cells in the grid and assigns them to a Marker allocated to this Unit of Study.

## Domain Vocabulary

This section contains a domain vocabulary that explains terms used within the Unilearn problem domain.

<b>User</b>	A user is a person who accesses the UniLearn system. A User has a login ID. A User can act as one or more roles in the system. A user can be one or more of the following categories, student, convenor, marker, administrator or supervisor.
<b>Student</b>	A student is an individual enrolled in one or more units of study at the university. A student submits one or more assignments to be assessed for each unit of study. Email address is the attribute in the student entity, as email is one of the important channels for the announcement.
<b>Group</b>	A group is two or more students allocated to work on an assignment together.
<b>Course</b>	An academic programme of a specific area, containing a number of units. To complete a course the student needs to pass a set number of units of study. A course may have entry requirements; however this is outside the scope of the Unilearn system. Course will not be modelled in the UniLearn system. It is included in the vocabulary for clarity.
<b>Unit of Study</b>	A Unit of Study is a series of lectures, and materials or labs on a topic. A student's grade in the unit of study is a combination of results from assignments, laboratory work, examinations and other tasks. A Unit of Study has a code (e.g. HIT8098) and a name (e.g. Agile Development Project).
<b>Assignment</b>	An assignment is a task to be completed by a student or group of students in a unit of study.
<b>Assignment Sheet</b>	An instruction sheet containing requirements for the assignment and details on how to complete it.
<b>Assignment Results Template</b>	A result template is included with each assignment as a set of criteria for submissions to be marked against.
<b>Submission</b>	A submission is a solution to the problem stated in an assignment sheet, prepared by a student for a unit of study. The student submits this work for assessment. Submissions for each assignment are required by a due date, however some assignments allow for late submissions, usually with a penalty to the student's result.
<b>Submission Result</b>	A student's submission is reviewed by a marker against a defined set of criteria (the results template). A result, consisting of a total numeric value plus comments / details is assigned to the submission.
<b>Unit Result</b>	The collation of the student's submission results across the Unit of Study.
<b>Unit Convenor</b>	A unit convenor is an individual who oversees one or more units of study, creating and managing assignments.
<b>Marker</b>	A marker is an individual who assesses one or more submissions for a unit of study.
<b>Administrator</b>	An administrator is an individual who administers courses, units of study and accounts for actors within the system.
<b>Supervisor</b>	A Supervisor is an individual who uses the system to track performance of other actors,

	such as a student's results and the overall results for a unit of study.
<b>Report</b>	A report is an online or printed document which contains statistical information about other entities within the system.
<b>Due Date</b>	The date when the student must make a submission for an assignment. Submissions made after the date may incur a penalty
<b>Publish Date</b>	The date the assignment sheet is made visible to students.

### Domain Model

This domain model shows the key entities in the domain and their relationship. The Submission and Assignment entities are composed of additional entities not show, such as submission files, assignment sheet and assignment results template. A user of the application may fill multiple roles (such as Marker & Unit Convenor). The many-to-many relationship between students and submissions indicates that a group of students may submit an assignment.

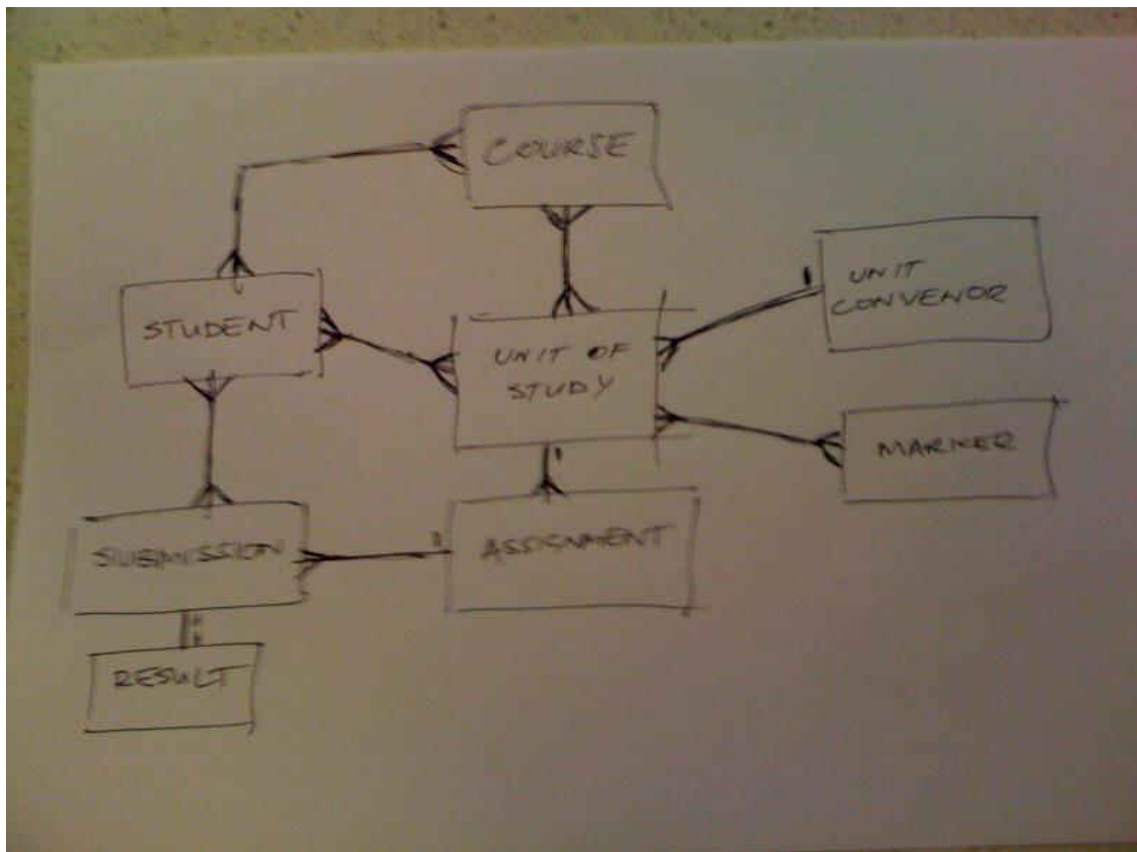


Figure Unilearn Domain Model

## Screen Designs / Report Layouts

This section shows mock-ups of screens and layouts in the application.

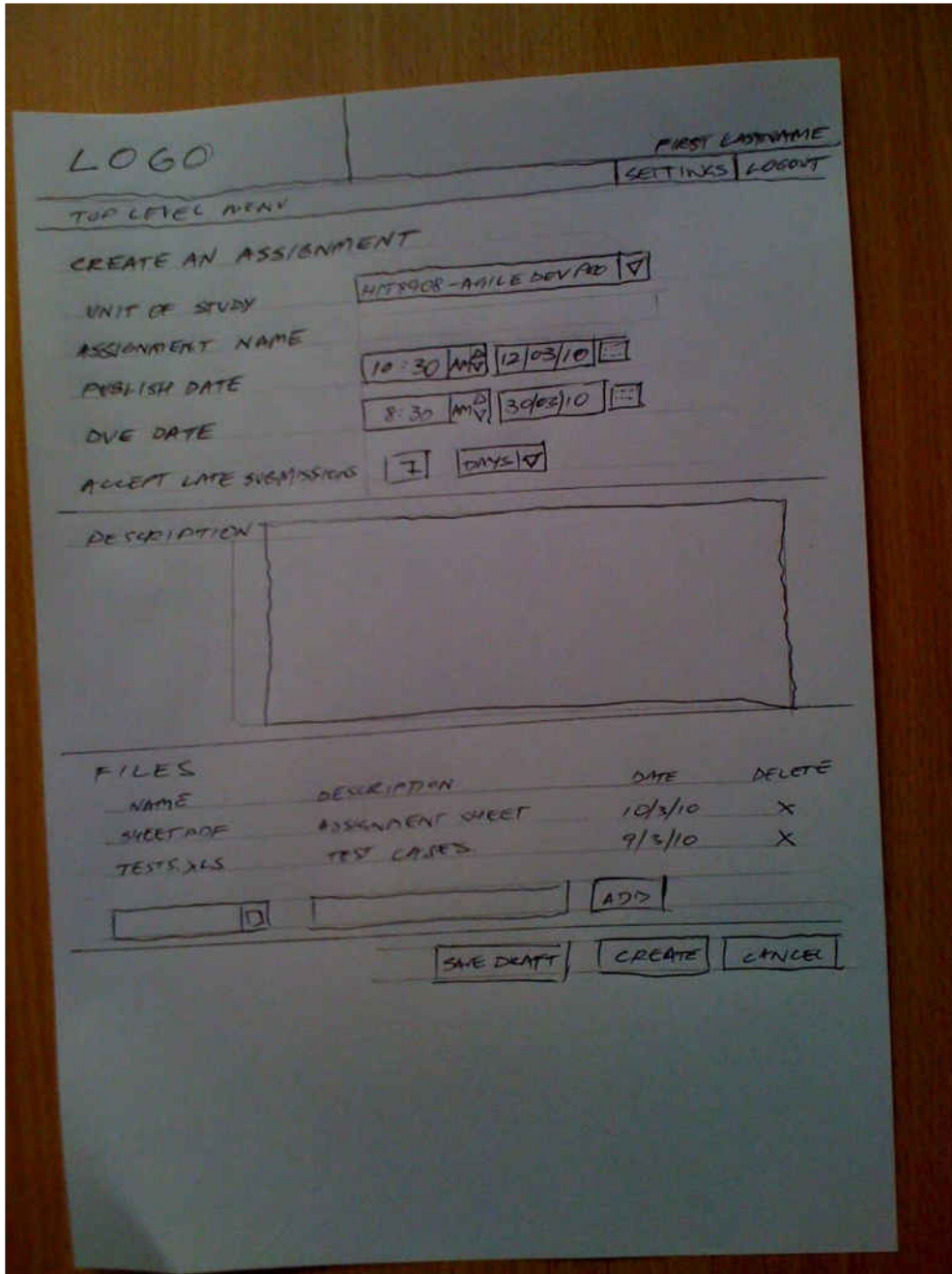
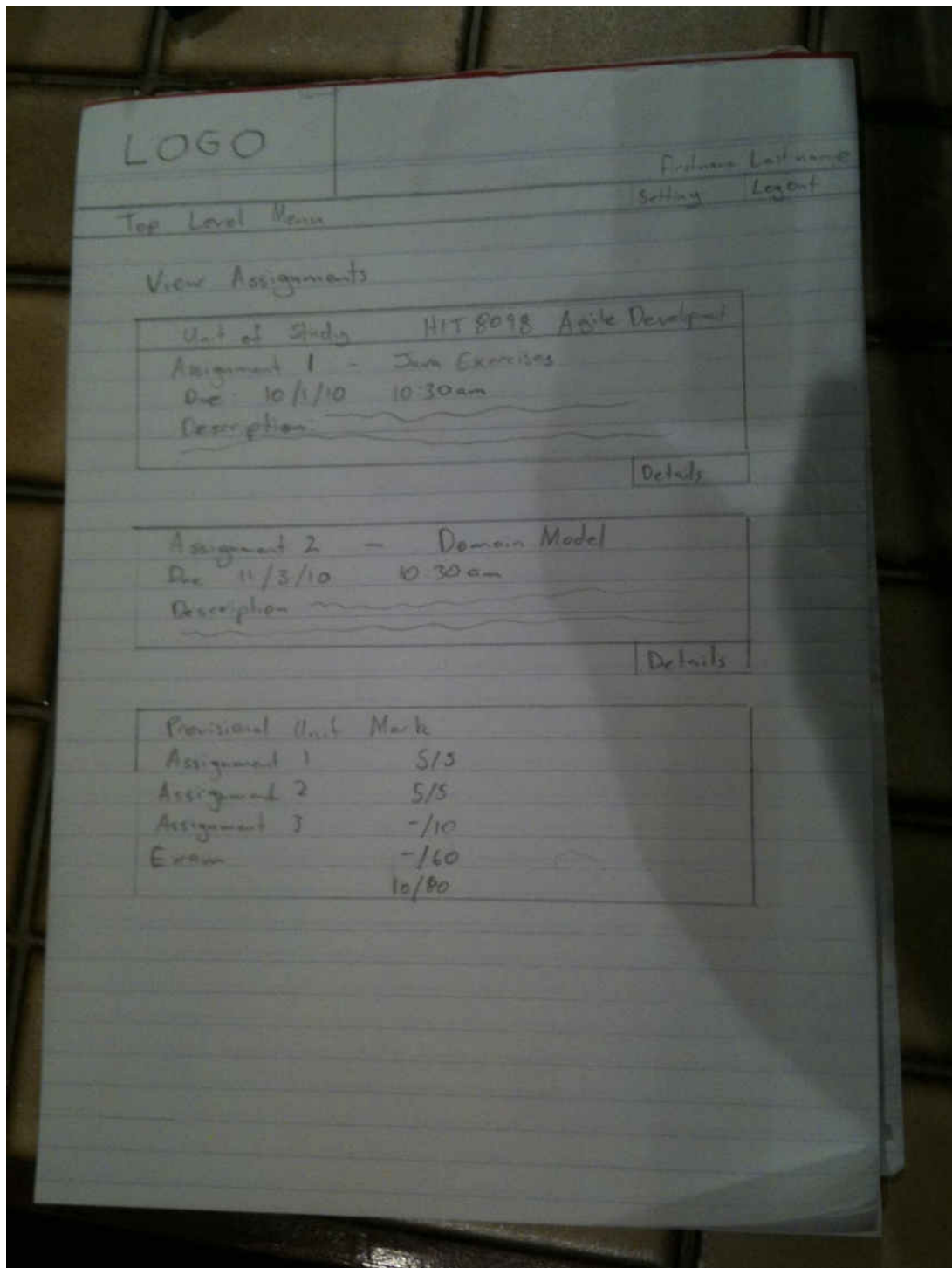


Figure Create an Assignment

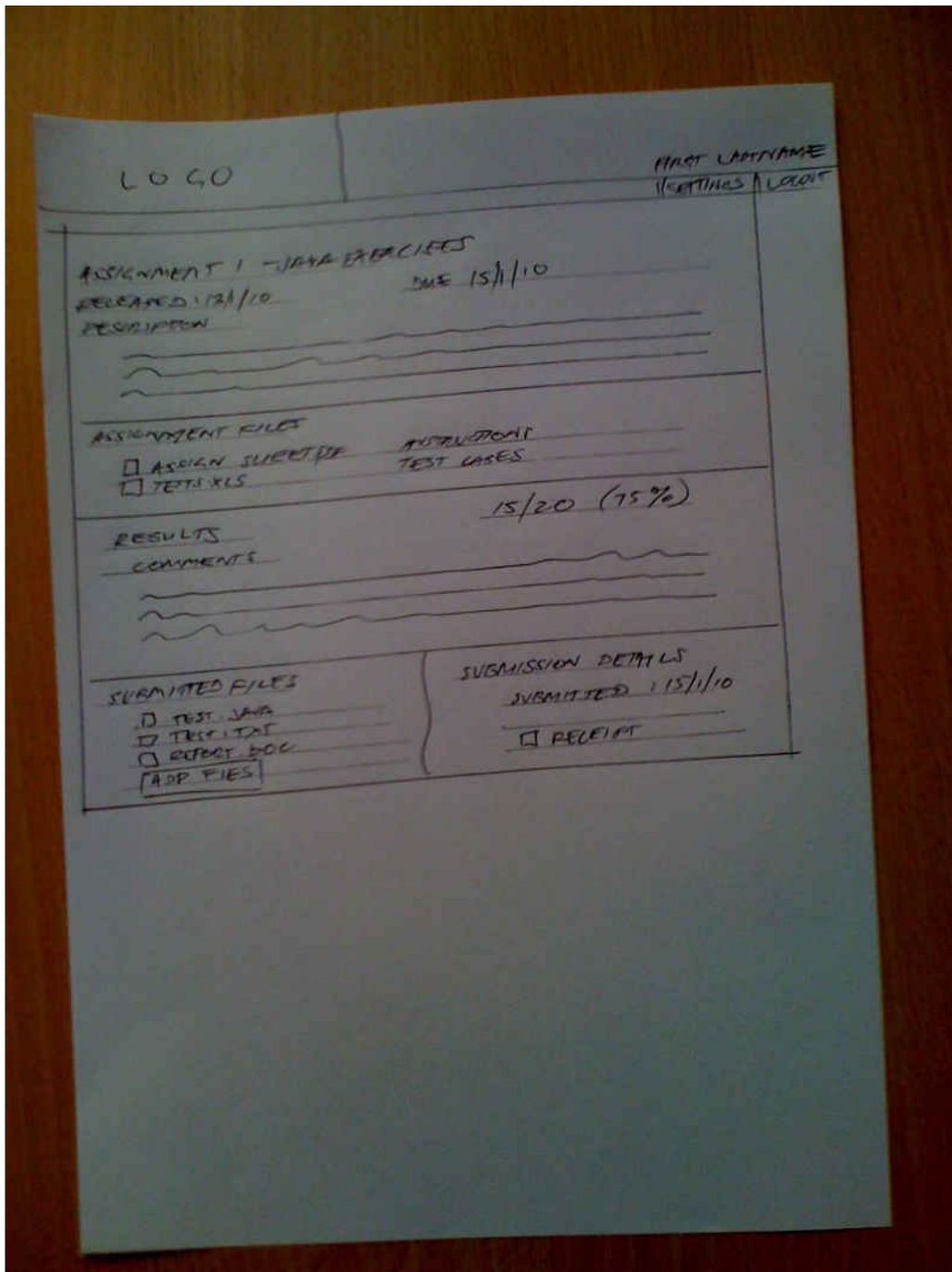
This mock-up shows the user interface for the **Unit Convenor creates a new assignment** user story. The user enters or selects appropriate data in each field, uploads any required files and saves the assignment as a draft, creates or cancels it.



**Figure View Assignments (List)**

This mock-up shows the user interface for the **Student views their assignment results** user story. The user selects a Unit of Study and is presented with a summary list of the assignments. The user can then select an individual assignment to view their results, submission and additional details.



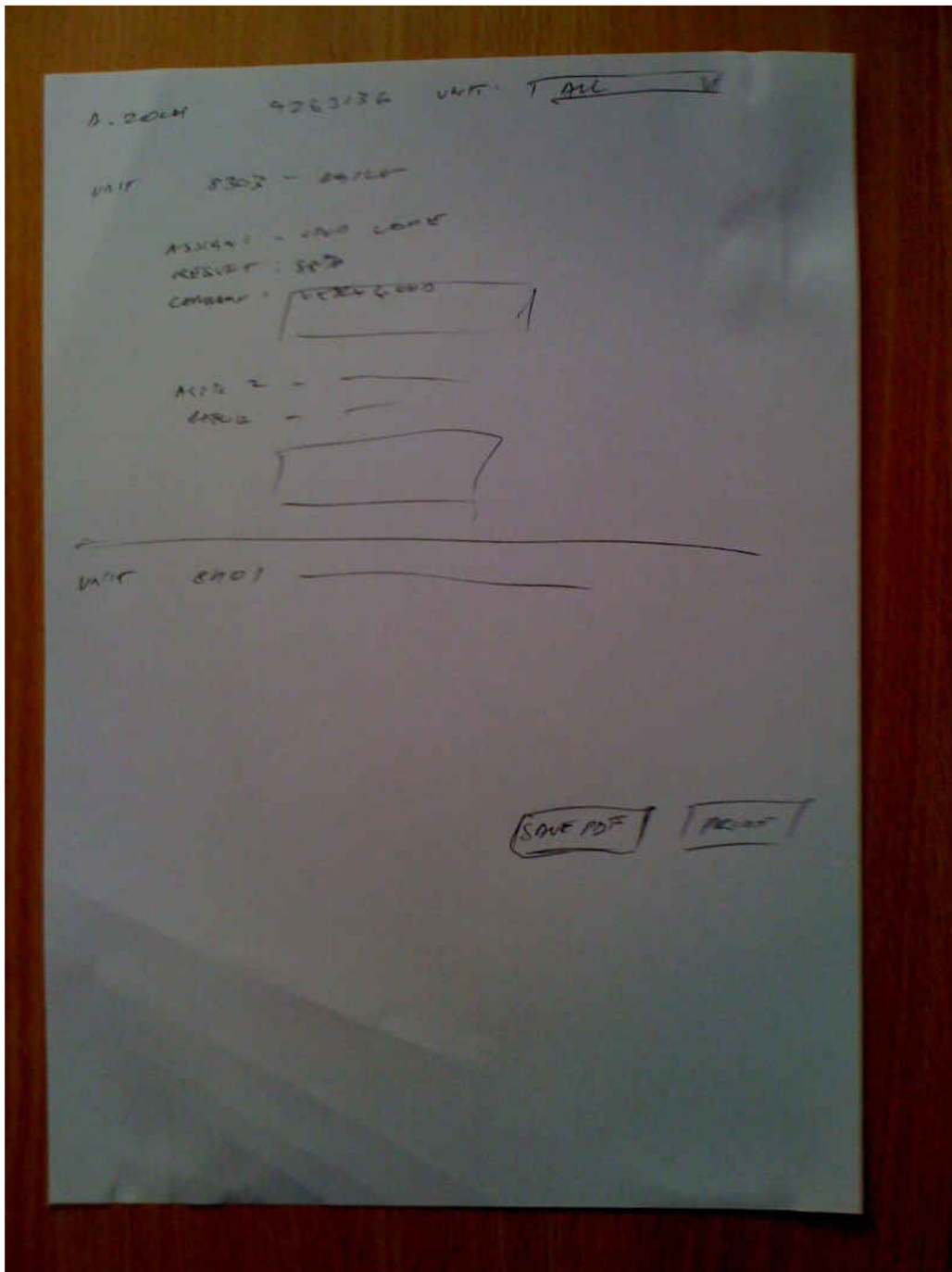


**Figure View Assignment Details**

This mock-up shows the user interface for the **Student submits assignment submission** and **Student views their assignment results** user story. The Assignment details such as Assignment Sheet and other files are available to the user.

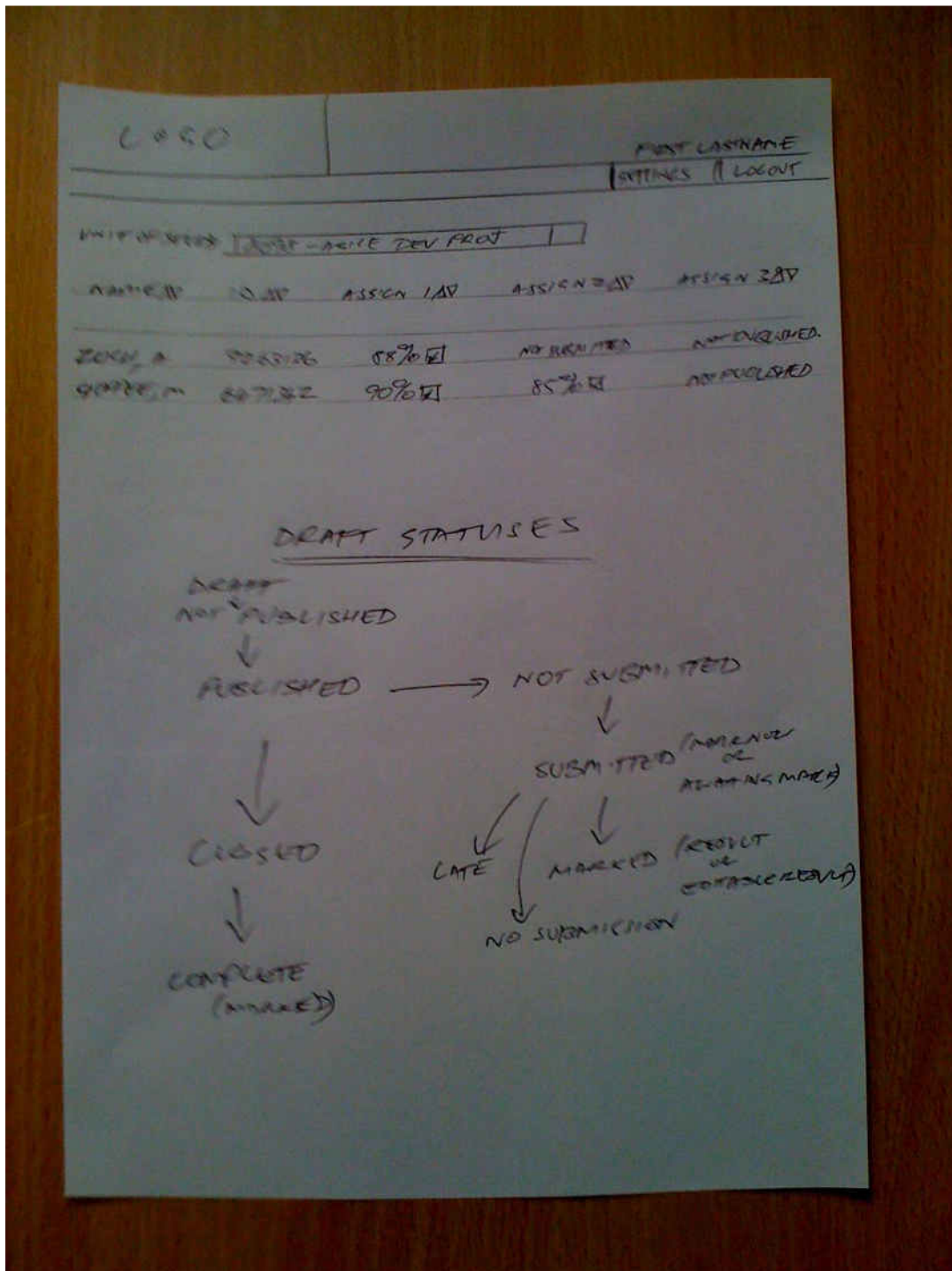
If a submission has been made by the user for this assignment; the submitted files and submission details (submission date, receipt) are also presented. Once submitted the files cannot be changed.

If the submission has been assessed, the results are also presented.



**Figure Student Assignment Results Report**

This mock-up shows the user interface and report format for the **Supervisor views results for a student across all units of study** user story. The user has previously selected a student from a list or by searching. The student's assignment results are shown sorted by Unit of Study. The user may filter the results on all or a single Unit of Study. The report can then be printed or saved as a PDF document.



**Figure View Student Assignment Results**

This mock-up shows the user interface and report format for the **Marker enters results for a student's assignment**, **Unit Convenor views a student's assignment results for a unit of study** and **Marker updates assignment result for a student** user stories. The Unit of Study is selected and a list view of the students enrolled is presented. This list may be sorted on each field (denoted by the small arrows in the field title). A column is shown for each Assignment in this Unit of Study. In this column, the status of the student's submission is shown. A draft of the statuses for Assignments and Submissions is also included in this diagram. The user can click the status to make changes (based on the system's business rules and user privileges). For example, a Marker may enter a result on this page. A small box next to the result can be clicked to bring up a page showing comments and a results template.

## Architectural Model

The component model focuses on identifying the initial architectural landscape of the system. In this case, the main components identified and pictured below are:

- Reporting
- Staff Module
- Student Submission processor
- Alerts (through email or text messaging)

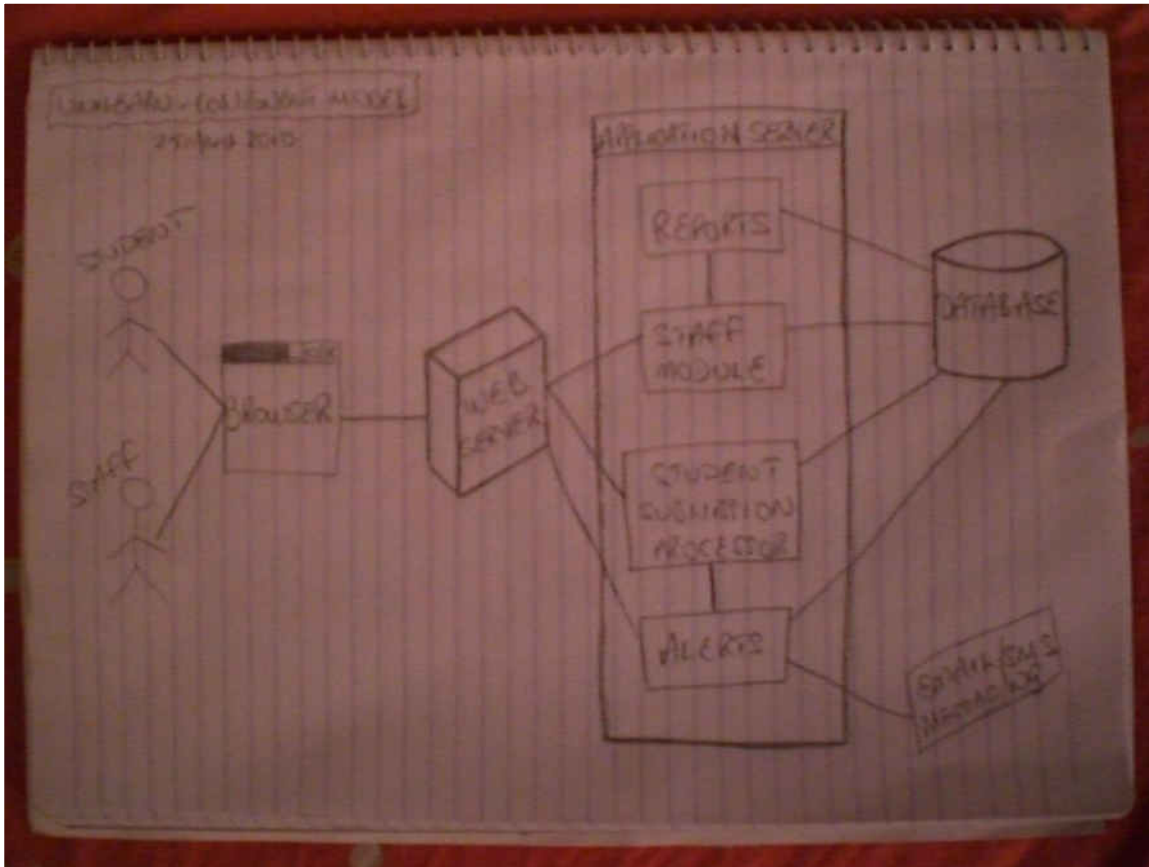


Figure Unilearn Architectural Model

As pictured above, there are various interactions between the users, the browser, the web server, the application server and the database. The users will make requests via the web browser, which will then contact the web server. Based on the requests made, the web server will either pick the staff module or the student submission processor to accomplish the requests.

As an example, a staff member queries a report about the number of students who have submitted their assignments for a particular unit of study, the web server will call the staff module, which will then call the reports module to extract the report from the database.

If a student wants to submit an assignment, he will make the request via the web server, which will call the student submission processor module to be able to upload the assignment to the database.

If a Unit Convenor uploads an assignment online, the staff module will be called and the assignment will be stored in the database. Meanwhile a request can also be made via the web server to send alerts to students via email or text messaging.