

Moodle Mobile Enhancements for Totara: Functional Specification

Document Control

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1 Purpose of this document

The primary purpose of this document is to define the functionality of the mobile app, and to brief our development team.

2 Overview

2.1 Background

This document assumes that we are improving the existing Moodle Mobile application and therefore adding functionality as well as bringing existing functionality into line with the new developments.

2.2 Systems

The functionality described in this document is based on developing on Moodle 2.4 and Moodle Mobile 1.2.

2.3 A note on wireframes

Wireframe designs have been included in this document as high-fidelity Totara specific Moodle Mobile wireframes. These are grey-screen only and represent the portrait view of the User Interface at one screen size only (384px width). For a full set of wireframes please see the 'Totara mobile wireframes v0.3.pdf' document.

Further art direction will be done to design the final look of the site.

3 Requirements

3.1 General

Requirements are fully documented in 'LMS Lite MVP and proposition v0-3.docx'. A summary of the requirements is included in the table below for reference although it is recommended to read the above document for a full background.

The requirements are split into Moodle Mobile, Totara Lite and Moodle functionality for clarity.

3.1.1 Moodle Mobile

ID	Requirement	Comment	Section covering this requirement
01	Ability to log in		4.2.6.3 4.2.6.7
02	Ability to view a representation of the home	The thinking behind this requirement is that we have a way of showing an entry	4.2.6.4

	page	content page (much like a single HTML label) on the mobile device. This would not bring with it the functionality available on the regular homepage (for instance it would not allow you to add blocks etc) but would present clients with the option to create a static HTML label, which would allow branding and text. So think of it as a single, static content page.	
03	Ability to view a list of assigned courses		4.2.6.8 4.2.6.8
04	Ability to browse the catalogue by category	This includes viewing courses and programs	4.2.6.5 4.3.3.1
05	Ability enrol into courses	Where self enrolment is possible	4.2.6.6
06	Ability to view course contents / structure	Expect this to be a structural representation rather than matching the HTML layout seen on a desktop PC	4.2.6.9 4.2.6.10
07	Ability to view HTML labels	Not necessarily in situ as per item above	4.2.6.13.3
08	Ability to view descriptions of unsupported activities / resources	Where a activity / resource is not fully supported or viewable, the minimum functionality has to be to display the description alongside a note that users need to log in via their desktop to view the full contents.	4.2.6.12.3 4.2.6.13.4
09	Ability to launch SCORM activities, which are flagged as suitable		4.2.6.12.2
11	Ability to support regular SCORM tracking		4.2.6.12.2.1
12	Ability to warn users automatically when a connection has been lost	Key requirement	4.2.4
13	Ability to view file resources	For supported file types on the mobile device	4.2.6.13.1

14	Ability to view HTML pages	These do not have to adapt to the mobile device screen	4.2.6.13.2
15	Ability to view text pages		4.2.6.13.2
16	Ability to support simple, tracked assessment activity	Flagged as key requirement and LMS Lite considered not saleable without. No stipulation as to which underlying activity to choose.	4.2.6.12.1
17	Ability to toggle 'self completion' for activities where this is set		4.2.2.2
30	Ability to brand the LMS Lite web app	Set up task (development / configuration) but the app has to allow for this.	4.6.1.1

3.1.2 Totara Lite

ID	Requirement	Comment	Section covering this requirement
18	Ability to view assigned programs		4.3.3.1.3y
19	Ability to navigate to courses contained within programs	Where the course is unlocked	4.3.3.3
20	Ability to view list of alerts (my learning)	As per My Learning dashboard	4.3.3.6
21	Ability to view alert details (my learning)	As per My Learning dashboard	4.3.3.6
22	Ability to view list of tasks (my learning)	As per My Learning dashboard	4.3.3.5
23	Ability to view task details (my learning)	As per My Learning dashboard	4.3.3.5
24	Ability to view list of alerts (my team)	As per My Team dashboard	4.3.3.6
25	Ability to view alert details (my team)	As per My Team dashboard	4.3.3.6

26	Ability to view list of tasks (my team)	As per My Team dashboard	4.3.3.5
27	Ability to view task details (my team)	As per My Team dashboard	4.3.3.5
28	Ability to click through to course from alert or task		4.3.3.5 4.3.3.6
29	Ability to view upcoming face-to-face bookings		4.3.3.4

3.1.3 Totara

ID	Requirement	Comment	Section covering this requirement
10	Ability for LMS administrators to flag whether SCORM activities are suitable for smartphone / tablet / both	In the desktop view of the LMS. Admin functionality is excluded from the scope of the LMS Lite mobile web app.	4.4.2

3.2 Refactor Code for Tests

The current Moodle Mobile code base does not contain unit tests as raised in the Moodle tickets <https://tracker.moodle.org/browse/MOBILE-381> and <https://tracker.moodle.org/browse/MOBILE-427>

To enable us to add test coverage we will re-factor the Moodle Mobile code-base. Specifically this would involve breaking down all methods that are too long and perform more than one function. Breaking the code down into smaller, self-contained methods makes it possible to add unit tests and also helps with readability, and will make future development and maintenance easier.

4 Proposed solution

4.1 Overview

A decision has been made to use the Moodle Mobile code as the underlying code base for the Totara Lite Mobile app. The Moodle Docs page for Moodle Mobile is: http://docs.moodle.org/dev/Moodle_Mobile and current Moodle Mobile issues and road map tickets can be found here: <https://tracker.moodle.org/browse/MOBILE>

Moodle Mobile has been developed as a hybrid mobile application. Hybrid development combines the capabilities of both the native and HTML5 application worlds. Hybrid applications are primarily built using HTML5 and JavaScript, that is then wrapped inside a thin native container that provides access to native platform features i.e. PhoneGap.

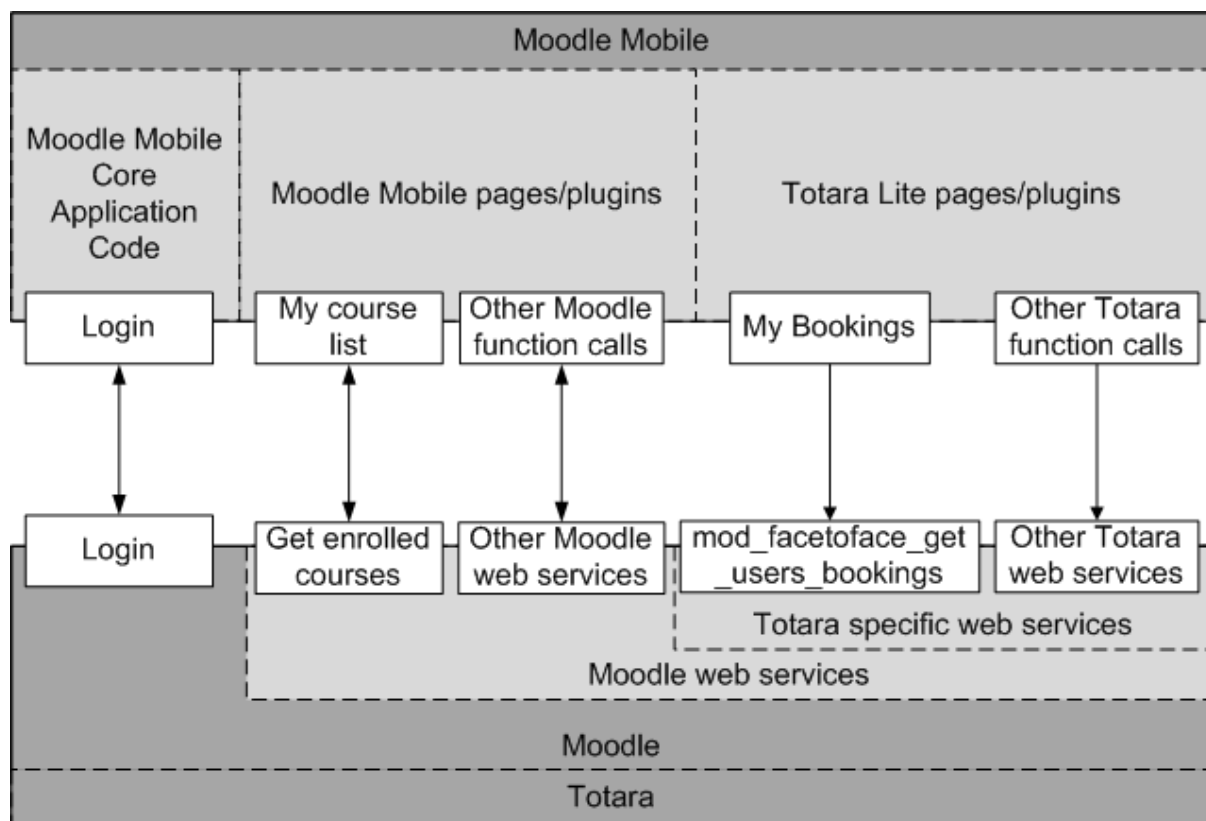
Moodle Mobile is a [Single page application](#) which should provide a fluid user experience akin to a desktop application.

Totara Lite will initially be released as a web application and then converted into a hybrid app using Phonegap. The web application will allow faster client rollout and the hybrid app will allow offline functionality such as the offline SCORM player and access to built-in phone components.

We will be using the existing Moodle Mobile framework which uses plugins to implement all site functionality. This allows the removal of a plugin and to replace it with another with functionality developed specifically for a client, for example, if a course page needs to be formatted differently a new 'course page view' plugin can be developed and swapped over for the standard view. It also means that new functionality can be developed and added to the Mobile app as required.

Where required we will create additional web services for both Moodle and Totara functionality.

The following diagram describes the relationships between functional areas of the Totara site and Moodle Mobile. Native Moodle Mobile code handles the authentication and existing Moodle Mobile pages. We will add additional Moodle Mobile pages and functionality as well as Totara specific pages and functionality into the mobile app as well as creating the required web services in Moodle/Totara as appropriate.



All changes will be developed so that the Moodle functionality can be made available to Moodle to integrate into their existing code base. Totara specific functionality will become part of the Totara code base.

We will use libraries and frameworks where available to take advantage of previously developed functionality and recognised ways of structuring code to enable other developers to understand and expand on the existing code. Some examples are [jQuery mobile](#), [Backbone.js](#) and [Twig](#) although the exact ones to be used will be decided in the technical specification and will be dependent on the libraries used by Moodle Mobile.

4.2 Moodle Mobile development

4.2.1 Navigation

The existing navigation method used in the Moodle Mobile application restricts the user navigation flow within the app. To create greater flexibility we will:

- Add an optional menu bar to the page layouts which will allow menu items to be added as required (via coding).
- Redesign the current navigation to include a main menu area. This will be accessible from all pages in the app. This will replace the initial page seen in the current Moodle Mobile application. See following sections to see the new layout.

The goals of the new user interface are for simplicity, clarity and efficiency without unnecessary clutter. The design aims to represent these goals with a coherent structure that is applied consistently across the entire system.

4.2.2 Completion settings

4.2.2.1 Automatic completion

Clicking any activity/resource needs to send completion settings as appropriate back to the main site.

The following are possible actions to complete the activities:

Feedback	<ul style="list-style-type: none"> • Student must view this activity to complete it • View as completed if the feedback is submitted • Manually marked as completed
SCORM package	As the SCORM will be launched and tracked from the main Moodle site we do not need to handle completion of this activity within the Mobile app.

The following are possible actions to complete the resources:

File	Student must view this activity to complete it
Label	Only self-completion available for this resource
Page	Student must view this activity to complete it
URL	Student must view this activity to complete it

Resources in a standard Moodle that have the ‘Student must view this activity to complete it’ completion criteria set, require the user visit an intermediary page where they are asked to click on the link again before forwarding them onto the page. The link contained on the course page is a link to this intermediary page and not the link to the resource.

To enable us to track completion and to reduce the number of clicks required on the Mobile app we will write a web service that can take this intermediary URL, mark the activity as completed and return a valid external URL for the mobile app to open in a new window in the browser or download the associated file.

4.2.2.2 Manual completion (ID 17)

For activities and resources where self-completion is available, the user can click the appropriate link to complete these.

4.2.3 Hidden login (Single Sign On)

There are instances where we need to send the user back to the main Totara site from the mobile app where the user should not realise they are launching content from the main site e.g. when launching SCORM content. For a good user experience we should not ask for username and passwords again and therefore we will implement an SSO solution. Moodle Mobile are currently working on this functionality <https://tracker.moodle.org/browse/MOBILE-113> and we propose to link into this if possible.

If the Moodle Mobile solution does not meet our requirements we will need to create a web service to log the user into the site. We need to take into consideration that the username and password may not have been saved locally (see 4.2.6.3) and we will therefore need to use the current token to authenticate the user.

4.2.4 Monitor connection status (ID 12)

As users can partake in scorm e-learning activities and there is a requirement for an active connection back to the hosting site for scorm tracking to work, we need to detect the presence of a network connection and inform the user of the connection status if this fails. It cannot be guaranteed that the e-learning itself will warn the user that connectivity has been lost therefore we need to handle this within the application.

Various methods will need to be implemented to allow for this. The following article covers some fundamental approaches to achieve this <http://www.html5rocks.com/en/mobile/workingoffthegrid>

Full details will be included in the technical spec on how this will be implemented.

4.2.5 Key user journeys (Moodle Mobile)

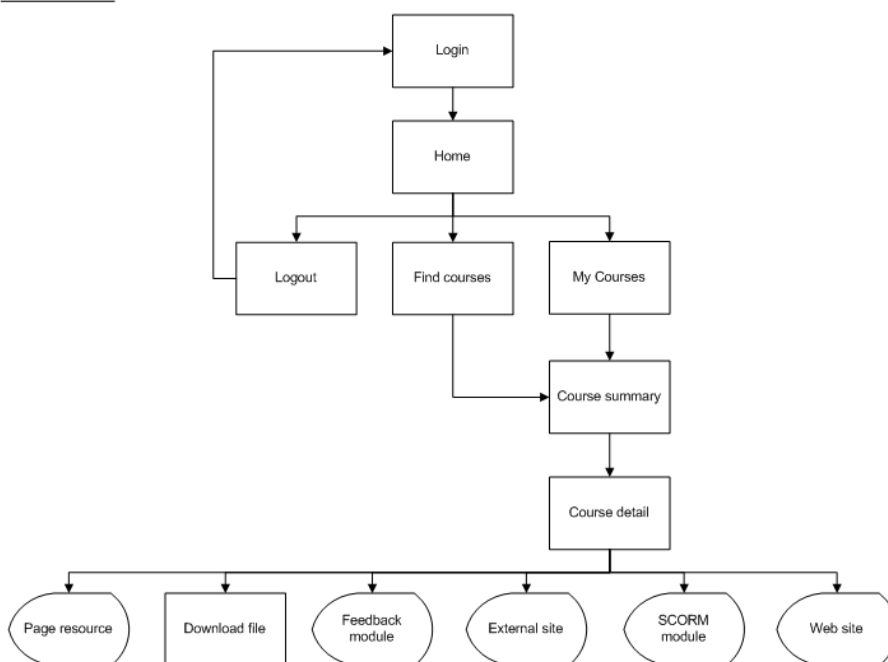
This section describes the changes and new functionality in Moodle Mobile.

4.2.5.1 Learner

4.2.5.1.1 Overview

An overview of the application navigation is shown in the flow diagram below. Some of the items have sub-steps which are shown in more detail in their respective sections within this document.

Overview - Moodle



4.2.5.2 Administrator

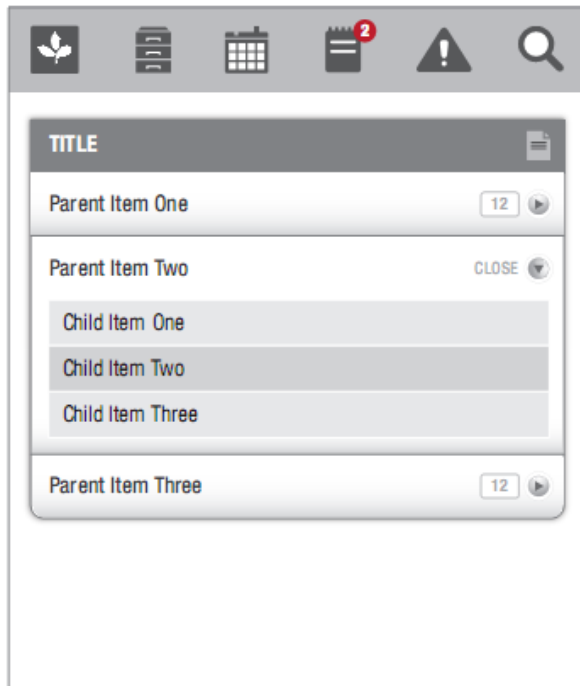
No administrator functionality is included in the Moodle mobile app.

4.2.6 Key site pages (Moodle Mobile)

4.2.6.1 Menu Bar

The customisable short cut menu bar along the top of the app allows the display of a number of icons to key functionality within the app and can highlight the number of items that require attention. This should be configurable via the theme to set which links are included. Each screen size has its own number of icons as set in the theme for the app.

With increased horizontal space icons become bigger or additional icons are added.



Standard icons/links to be included by default are:

- Main menu
- My Courses

4.2.6.2 Main menu

When the menu icon is selected a panel slides out to present all navigation options. Additional vertical space can be used for additional plugin features as they are added.

This is a redesign of the first page currently viewed on the Moodle Mobile app. This mostly shows links to plugins that have been installed in the current installation with some additional sections such as current user name.

The standard Moodle Mobile Main menu currently shows:

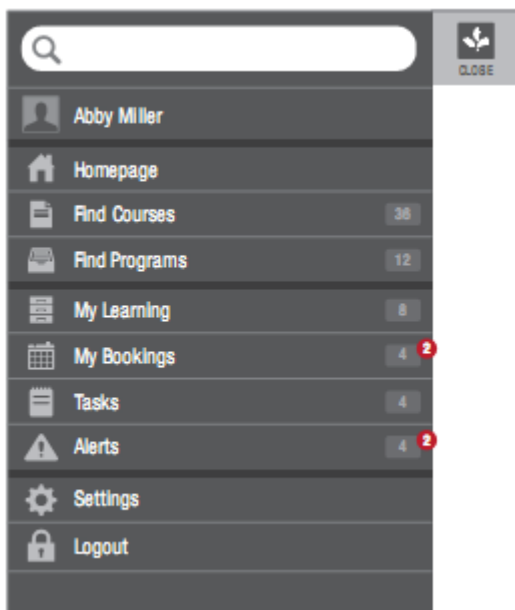
- Upload
 - Photo albums
 - Camera
 - Audio
- My Courses

- [list of courses]
- Website
- Help
- Settings

We propose to change this to show:

- Upload
 - Photo albums
 - Camera
 - Audio
- My Courses
- Website
- Help
- Settings

The new design changes the way that the 'My Courses' section displays the list of courses. The full list will not be displayed on this page, clicking the My Courses link opens a new page which lists the enrolled courses (see 4.2.6.8). The ability view the participants in a course will also be moved to this new My Courses page



4.2.6.3 Login (ID 01)

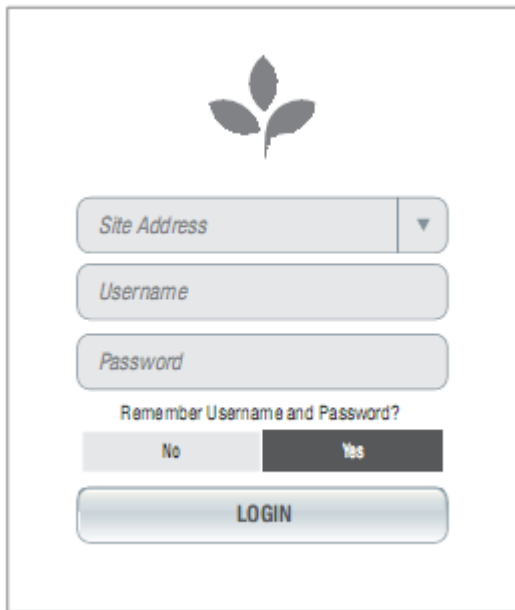
This page is seen by learners when they launch the application. The current login page is only seen the first time you connect to the site. Following connections to the same Moodle instance the site automatically uses the existing login details held by the Mobile app.

This process is not secure if the app is accessed via a shared device, therefore we will there make the following changes to the Login page and process:

- The option to login to a site without saving the username and password details.
 - The default will be to remember user details.
- If multiple Moodle sites are saved, then offer a dropdown to select which site to connect to

- Accounts can still be deleted via the settings
- If only a single account is saved then auto log them in
 - new accounts can still be added via the settings

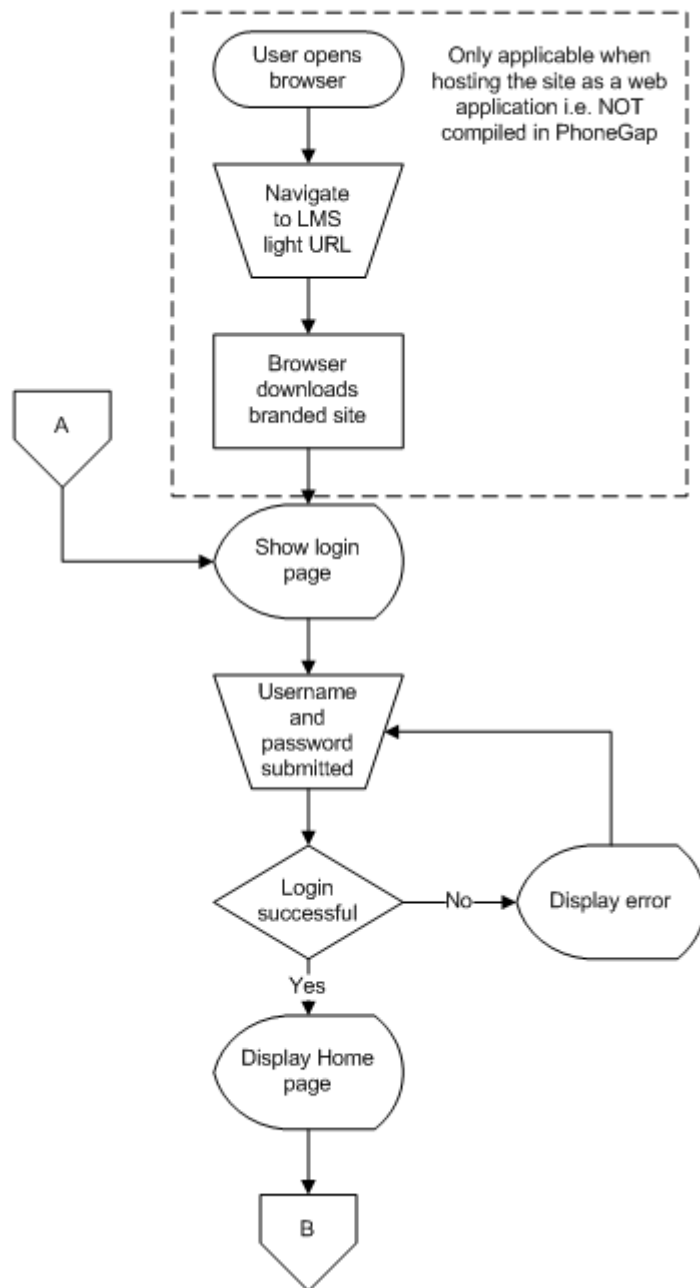
As the user needs to define the site to connect to as part of the login process we cannot pull in any dynamic theme elements from the main site until they have logged in, however we will add the ability to set an image and descriptive text on the login page in the default theme. This allows the site designers to include branding and help text specific to the distribution of the Mobile app.



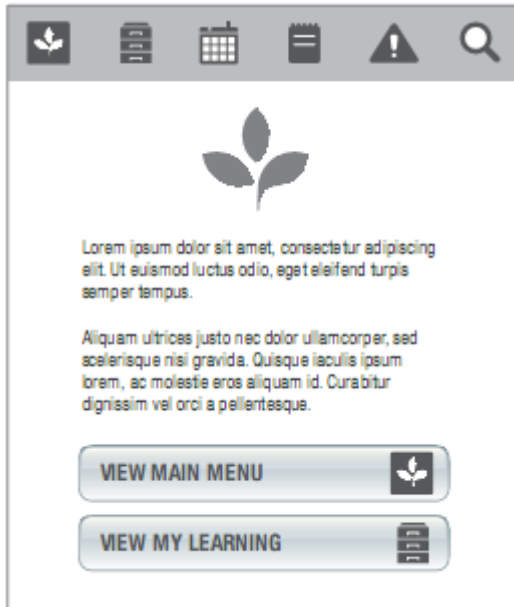
The login form is enclosed in a light gray border. At the top center is a stylized leaf icon. Below it are three input fields: 'Site Address' with a dropdown arrow on the right, 'Username', and 'Password'. Below these fields is a checkbox labeled 'Remember Username and Password?'. Under the checkbox are two buttons: 'No' and 'Yes'. At the bottom is a large 'LOGIN' button.

The user can enter the URL of the main site and their username and password.

Login



4.2.6.4 Home page (ID 02)



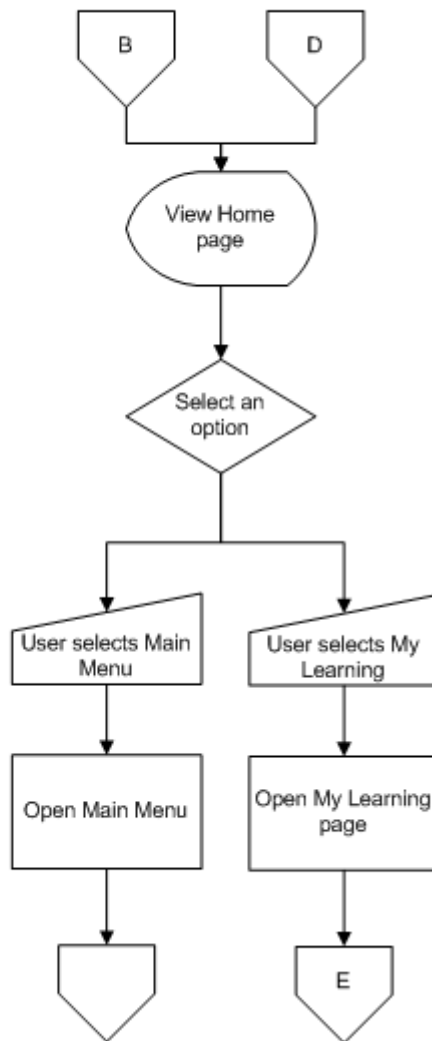
The Home page provides options for branding alongside a plain text description. The HTML to display on this page can be configured on the main Moodle site and is downloaded when the user logs into the app. This enables configurable messages to be sent out to the app without the need to update/re-distribute the application.

View main menu button is provided to help introduce the user to the navigation within the application.

View my learning button is provided to quickly direct users to their learning content.

Additional buttons can be coded to display on this page as required.

Home



4.2.6.5 Find Courses (ID 04)

Navigation to courses will be via the Moodle category/sub category structure as used on the main site.

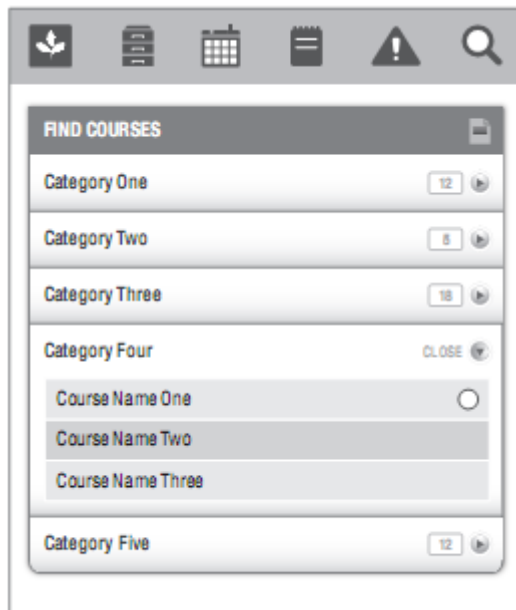
Each category is presented alongside an indication of the number of courses within the category.

Once a category has been expanded the number indication is replaced with a close label.

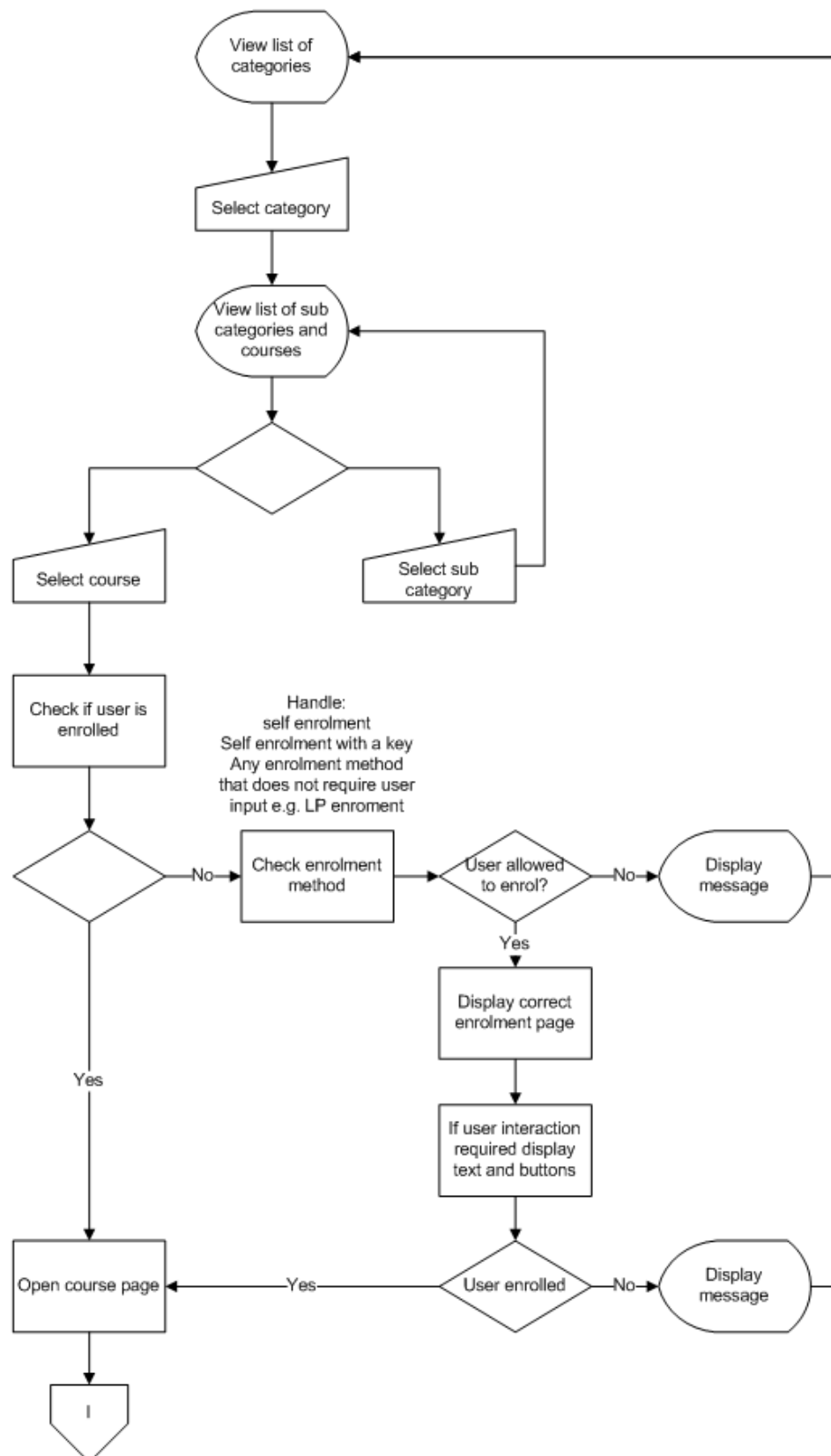
Long course names wrap onto a new line.

Course enrolment options are not shown to reduce clutter within the display.

If a user is already enrolled on a course an indication of progress (not started, in progress and complete) is displayed.



Find courses

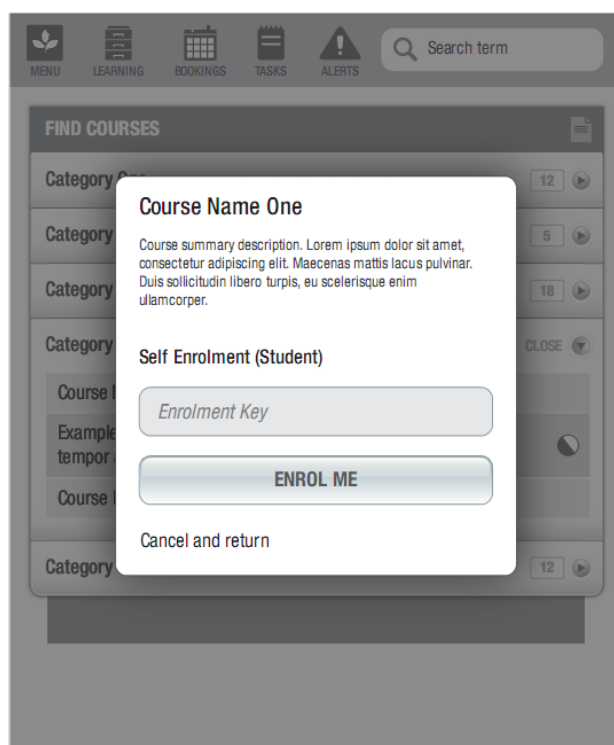


4.2.6.6 Course enrolment (ID 05)

If a user selects a course that they are not enrolled on the enrolment message is presented as a dialogue box.

Primary and secondary buttons are shown to either proceed and enrol (primary) or cancel and return (secondary).

The design of this dialogue box can be reused wherever necessary through the application.



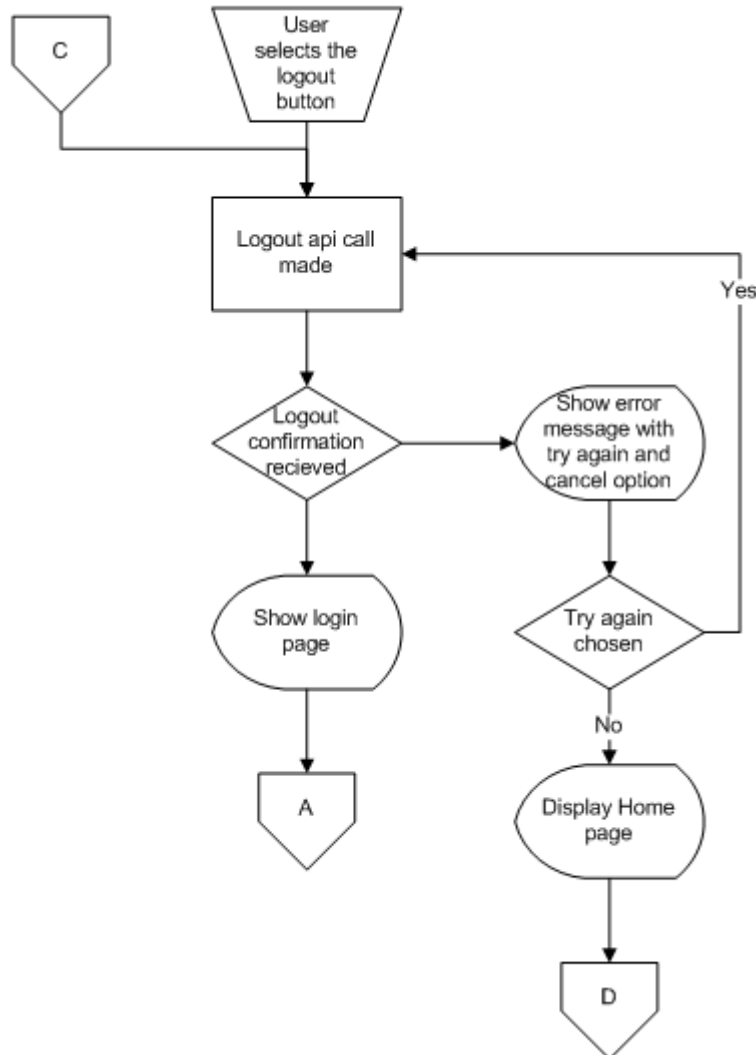
Where enrolment plugins require interaction from the user we will display an interface to allow this only for supported enrolment plugins as shown in the following table:

Enrolment method	Requires user interaction	User interaction supported by Moodle Mobile
Manual enrolments	No	N/A
Guest access	No	N/A
Self enrolment	Yes	Yes
Cohort sync	No	N/A
Category enrolments	No	N/A
External database	No	N/A
Flat file (CSV)	No	N/A
IMS Enterprise file	No	N/A
LDAP enrolments	No	N/A
Course meta link	No	N/A
MNet remote enrolments	No	N/A
PayPal	Yes	No

4.2.6.7 Logout (ID 01)

Logout is accessed from the main menu on the home page. On logging out we will present the user with the login page.

Logout

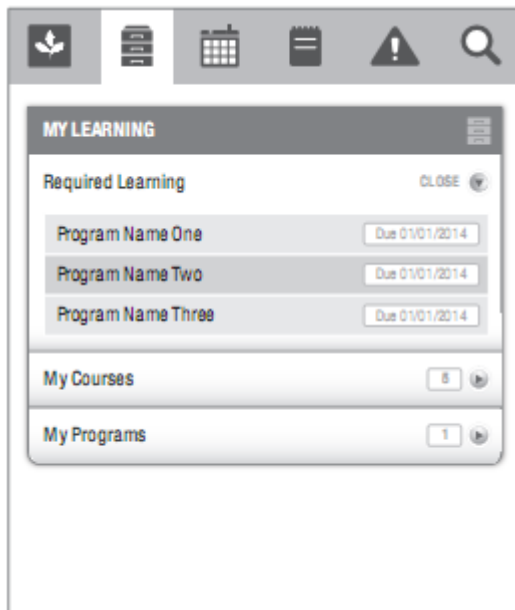


4.2.6.8 My Courses (ID 03)

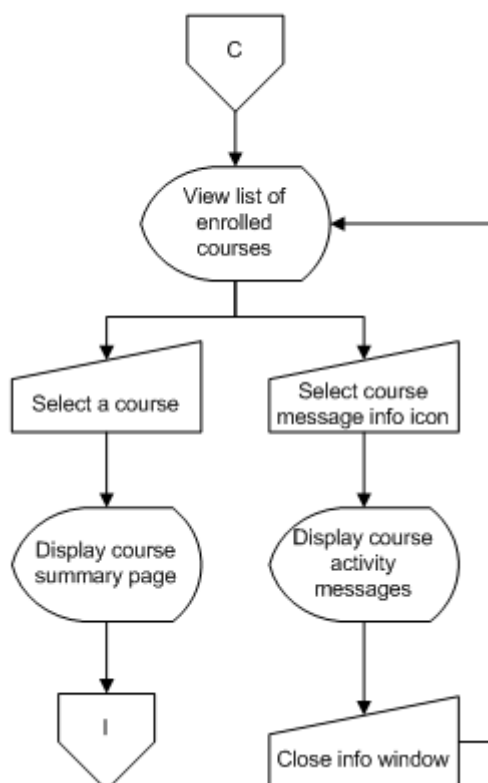
My Courses will be a section developed to show courses that the user is enrolled on.

The My Courses list is contained within a My Learning page (see section 4.3.3.1).

Courses in the list will contain a dropdown when clicked to allow the course page to be opened or for the Participants of a course to be viewed. This replicates the existing functionality found in the current standard Moodle Mobile main menu (see section 4.2.6.2).

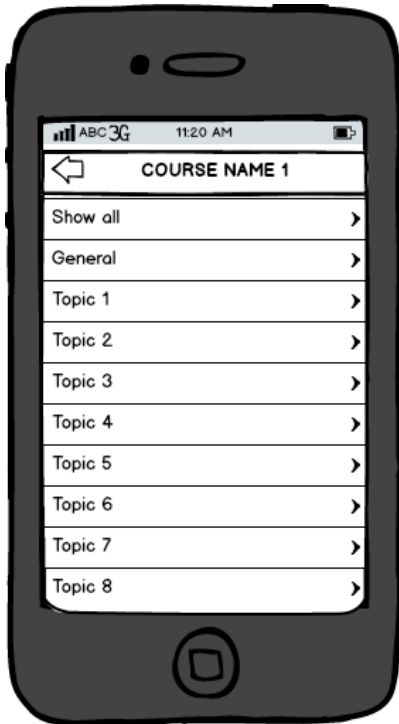


My courses



4.2.6.9 Course Summary (ID 06)

We propose to remove this page from Moodle Mobile as this introduces extra clicks that are not required. We will instead display the course page with all topics open by default.



4.2.6.10 Course Detail (ID 06)

The Moodle mobile course page is based on the Moodle topics and weekly course formats where topics/weeks are used to display sections of the course. Other course formats within Moodle will not be translated to the Moodle Mobile format when displayed.

The course page opens with all topics/weeks being displayed. Individual topics/weeks can be collapsed by the user.

The return arrow icon takes the user back to the previously viewed screen.

Course name is displayed with progress indication.

The topic summary description is taken from Topic 0 within the course (the very first topic section) and the wireframe illustrates Topic 0 that has activities/resources. This allows differentiation between areas. If no content is added to topic 0 then this area is left blank.

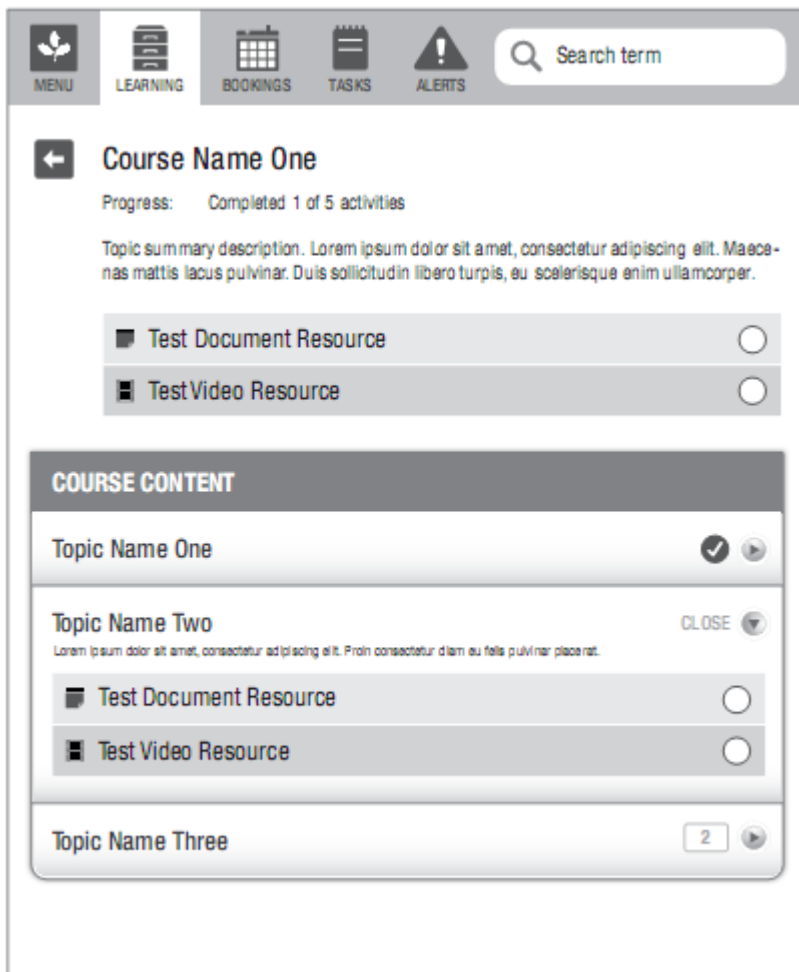
When collapsed, topics are presented with an indication of the number of items (activities/resources) within.

Expanding a topic removes the number indication and replaces it with a close label.

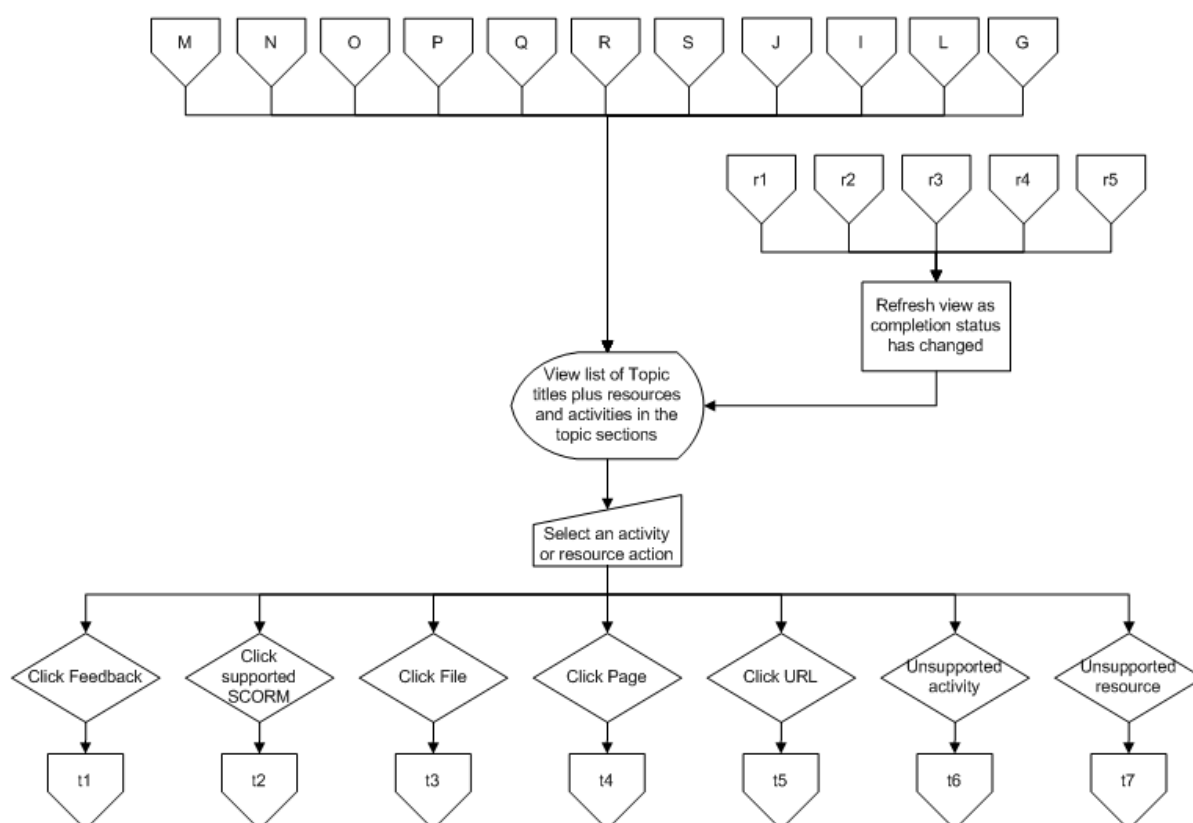
Once expanded the topic summary description and all activities/ resources are shown with an indication of progress.

When all activities in a topic are completed that are required for course completion we will show a completed icon.

E-learning that is not compatible with mobile devices (as defined in section 4.4.2) is displayed greyed out. Clicking the e-learning link displays the info box and contains a link the course page on the main site.



Course - All topics



4.2.6.11 Information

Each activity and resource will have related supporting information available from the course detail page. This will open a pop up window containing the relevant information for the specific activity or resource and a link to the main site.

4.2.6.12 Activities

The table below lists all available activities types within Moodle and indicates which will be available within the Mobile application.

Moodle Activity	Mobile compatible
Assignment	No
Certificate	No
Chat	No
Choice	No
Database	No
External Tool	No

Feedback	Yes – although we will not show the responses in this version
Forum	No
Glossary	No
Lesson	No
Quiz	No
SCORM package	Yes but only where flagged as Mobile suitable.
Survey	No
Wiki	No
Workshop	No

4.2.6.12.1 Feedback (ID 16)

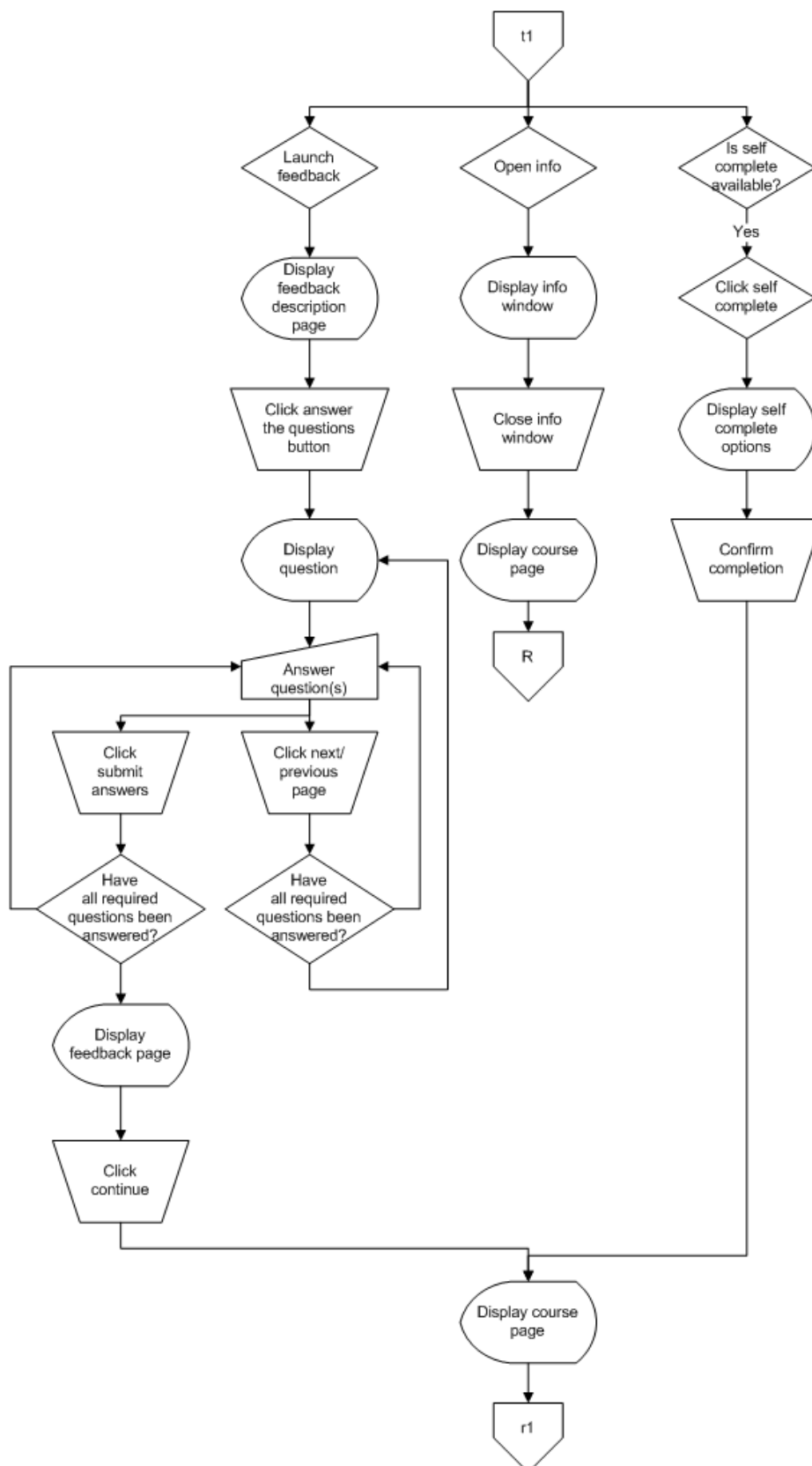
Feedback will not show the preview option or the option to view submitted answers summary report.

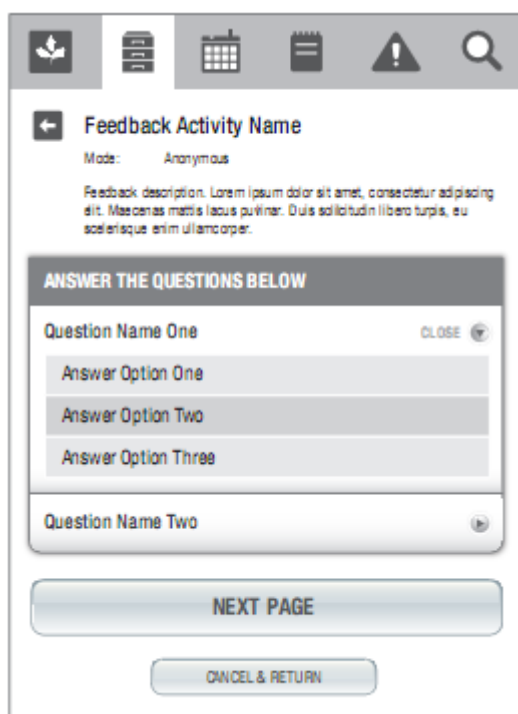
The return arrow icon takes the user back to the previously viewed screen.

Each question within the feedback activity can be expanded and collapsed.

Once a question has been completed and the section collapsed the question is shown as answered.

Topic - Feedback





Summary information

Feedback	Description text
----------	------------------

4.2.6.12.2 E-Learning (ID 09)

4.2.6.12.2.1 SCORM tracking (ID 11)

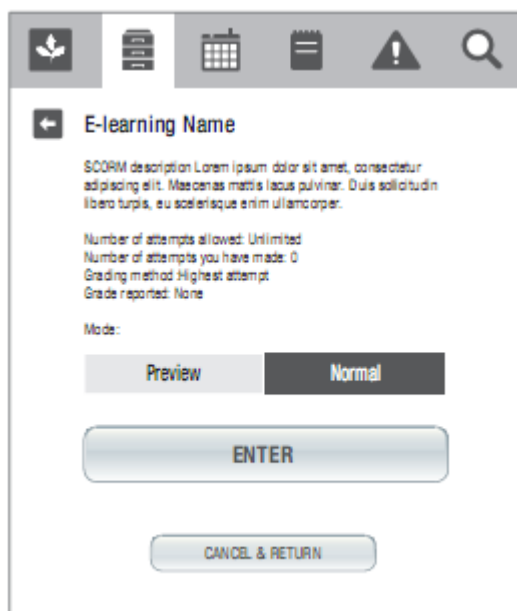
To enable SCORM activities to be tracked, the scorm needs to communicate with the scorm API on the main Moodle site where the SCORM is hosted. We do not want to create a SCORM API for the mobile app so we will log the user into the main site to allow the launch and tracking of the e-learning. We do not want the user to feel like they have logged into the main site therefore we will automatically log them in 'behind the scenes' and display the scorm content in an app window that gives the user the impression that they have not left the mobile app.


Because of the number of Display setting configuration options allowed on the SCORM activity we should assume that all options are chosen and therefore we need to be able to display the appropriate pages and information. The options available are:


Setting	Options	Notes
Display package	Current Window New Window	We will ignore these as we are displaying the SCORM in the app
Width		We will ignore this as we are displaying the SCORM in the app
Height		We will ignore this as we are displaying the SCORM in the app

Options (Prevented by some browsers)		We will ignore these as we are displaying the SCORM in the app
Student skip content structure page	Never First Access Always	We will create a content structure page within the Mobile app to replicate the functionality shown in the Main site.
Disable preview mode	Yes No	Part of the formatting for the content structure page (above)
Display course structure on entry page	Yes No	If displayed we will handle the pages that are displayed as you drill down through the folder hierarchy. Initially handled by the content structure page (above)
Display course structure in player		Displayed within the page that is displaying the SCORM.
Hide navigation buttons	Yes No	The navigation appears as a pop up within the SCORM window. It is suggested that this is set to Yes for mobile sites.

CONTENT STRUCTURE PAGE





 **E-learning Name**

SCORM description Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas mattis laus pulvinar. Duis sollicitudin libero turpis, eu sodalesque enim ullamcorper.

Number of attempts allowed: Unlimited
 Number of attempts you have made: 0
 Grading method: Highest attempt
 Grade reported: None

Mode:

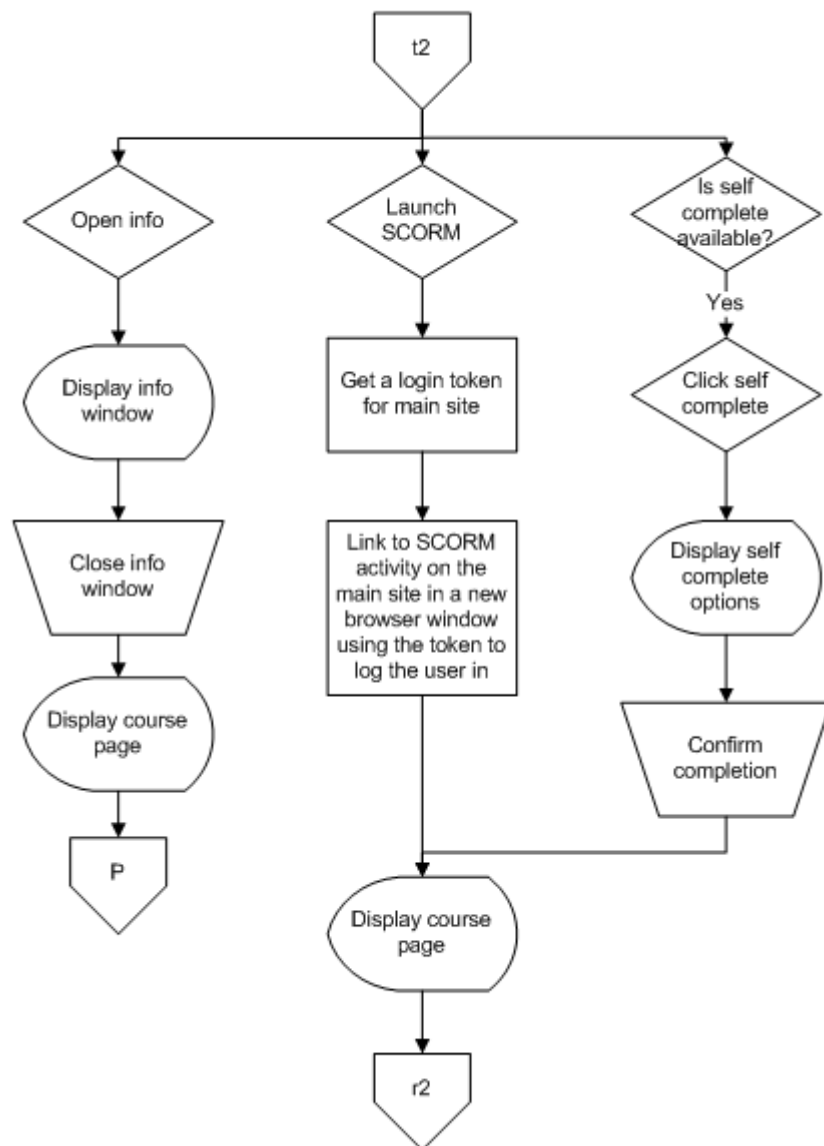
The return arrow icon takes the user back to the previously viewed screen.

The e-learning object description and attempts data is displayed with options to launch in preview or normal mode.

Enter button launches the e-learning object.

Cancel and return button takes the user back to the course page.

Topic - scorm



Summary information

SCORM package	Description text SCORM package: SCORM test Due date: Thursday, 20 June 2013, 10:40 AM
---------------	-----------------------------------------------------------------------------------------------------

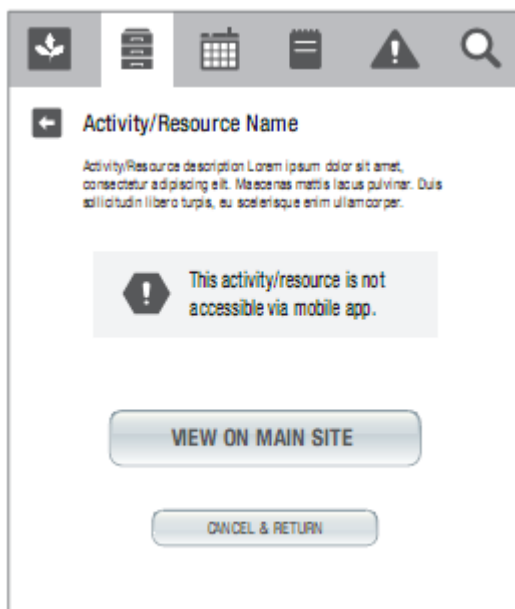
	<p>Number of attempts allowed: Unlimited</p> <p>Number of attempts you have made: 0</p> <p>Grading method: Highest attempt</p> <p>Grade reported: None</p>
--	------------------------------------------------------------------------------------------------------------------------------------------------------------

4.2.6.12.3 Unsupported Activity (ID 08)

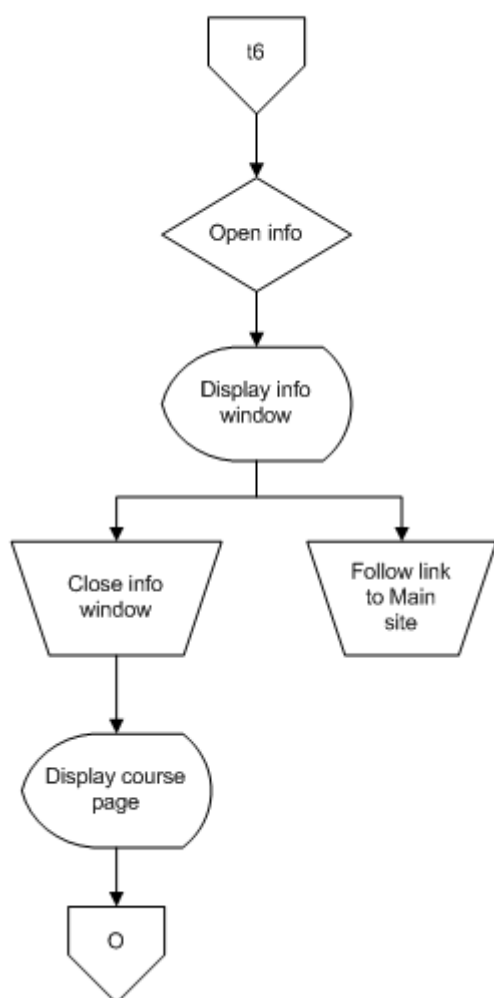
Any activity or resource that is not support by the mobile app is displayed with the appropriate message.

View on main site button takes the user to the course page within a web browser.

Cancel and return takes the user back to the course page.



Topic - Unsupported activity



Summary information

Standard Moodle Mobile summary information will be used for unsupported activities

4.2.6.13 Resources

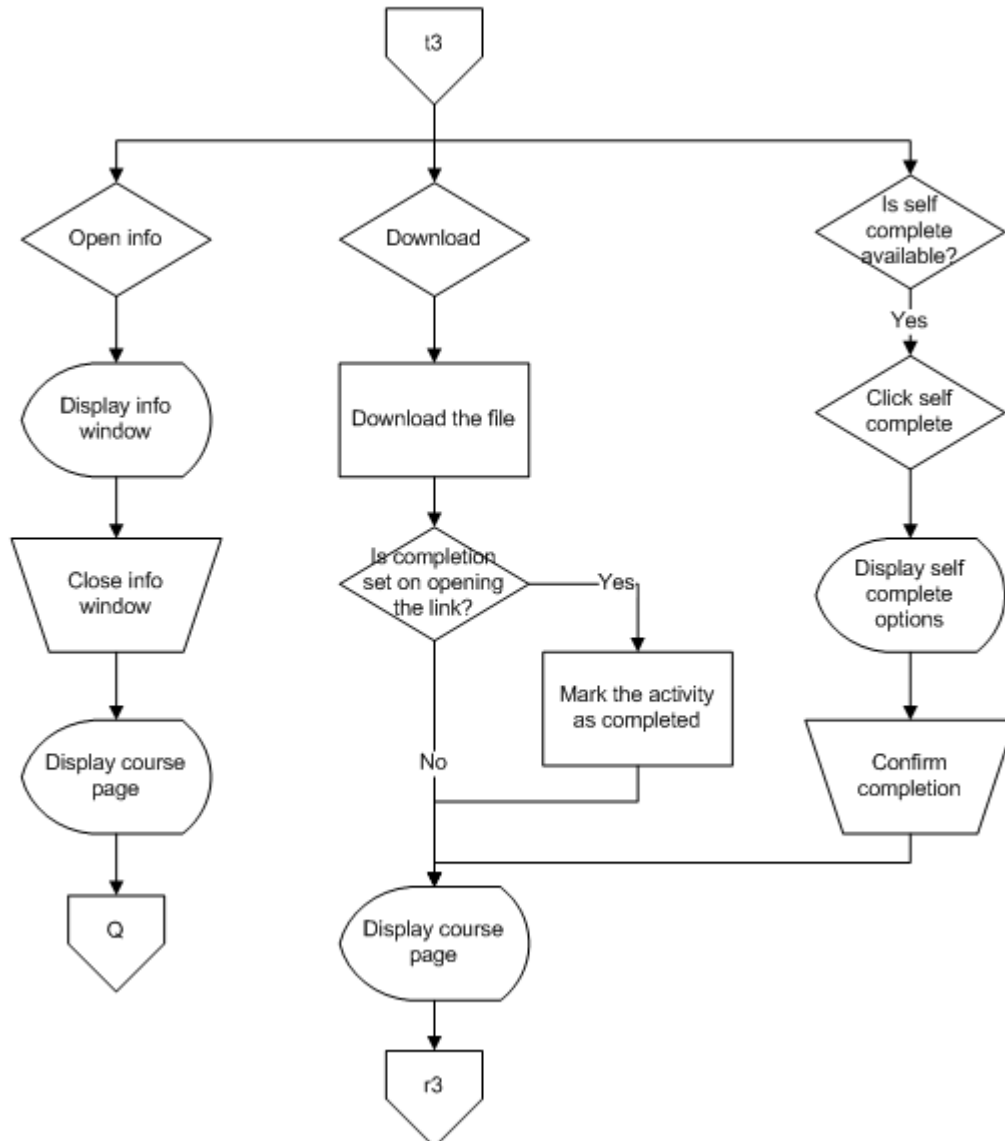
The table below lists all available resource types within Totara and indicates which will be available within the Mobile application.

Totara Resource	Mobile compatible
Book	No
File	Yes – force a file download to be opened in the mobile device's file reader
Folder	No
IMS content package	No
Label	Yes

Page	Yes
URL	Yes

4.2.6.13.1 File (ID 13)

Topic - File



Summary information

File	Description text
------	------------------

	<p>Size</p> <p>Displays the file size, such as '3.1 MB', beside links to the file.</p> <p>If there are multiple files in this resource, the total size of all files is displayed.</p> <p>Type</p> <p>Displays the type of the file, such as 'Word document', beside links to the file.</p> <p>If there are multiple files in this resource, the start file type is displayed.</p> <p>If the file type is not known to the system, it will not display.</p> <p>Resource name</p> <p>Resource description</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Info for document downloads (pop info)

test doc

Author: Admin User

License: allrightsreserved

Date added: 22/3/2013 17:01:50

Last modified: 22/3/2013 17:01:50

Size: 0.01 kb

Local

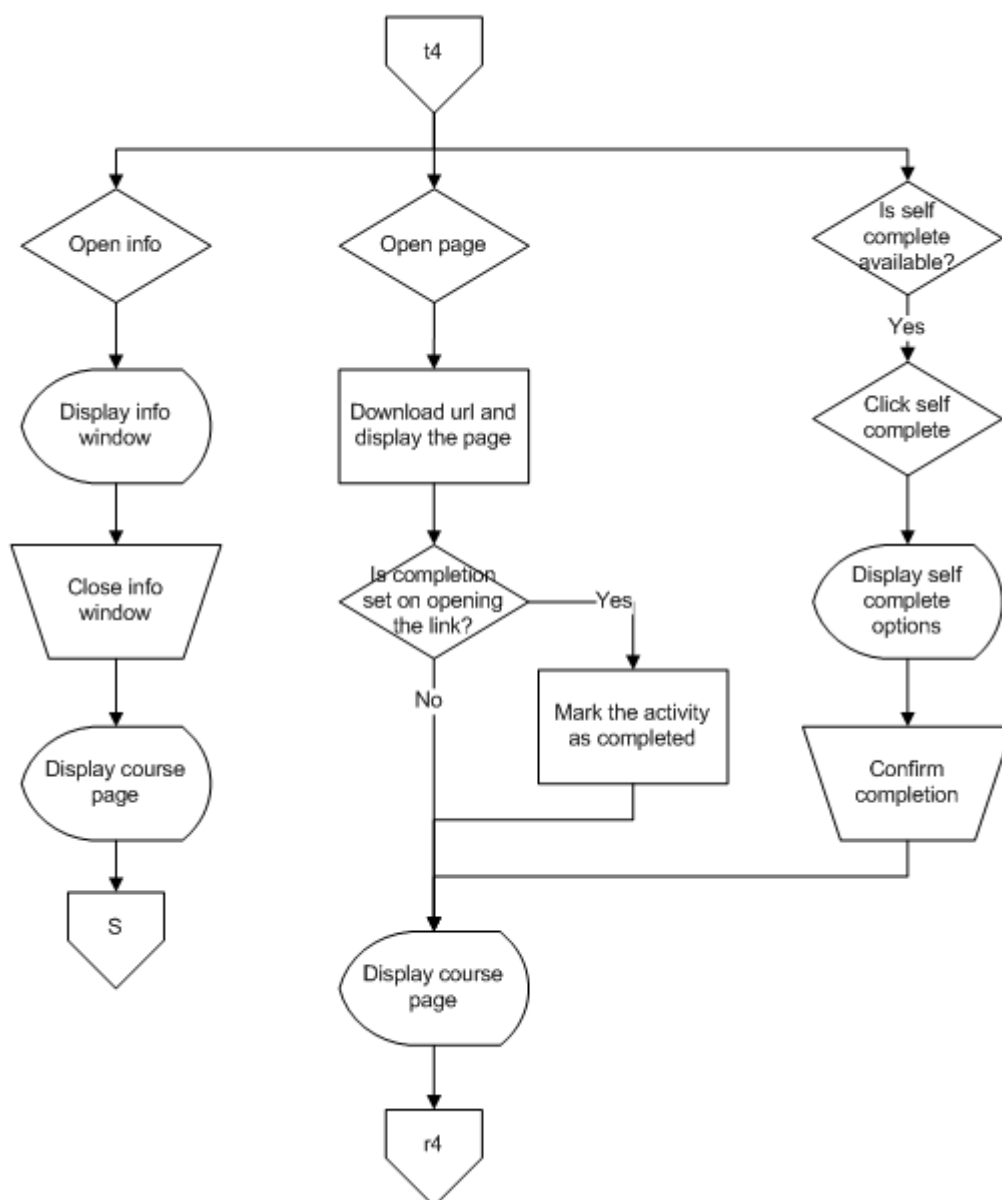
path: [emulator/index.html#/fake_base_path/a44e96ca3274b8708fb2eb827ab7530c/2/3/test.txt](http://localhost/moodle24/mod/resource/view.php?id=3&file=emulator/index.html#/fake_base_path/a44e96ca3274b8708fb2eb827ab7530c/2/3/test.txt)

Viewable on this app: Yes

<http://localhost/moodle24/mod/resource/view.php?id=3>

4.2.6.13.2 Page (IDs 14, 15)

Topic - Page



Summary information

Page	Description text
------	------------------

4.2.6.13.3 Label (ID 07)

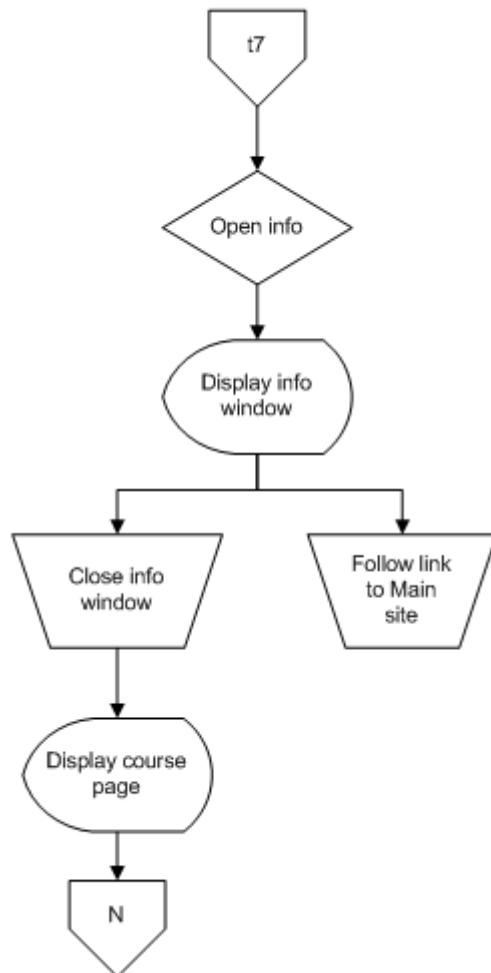
Potentially labels on the main site will include HTML/images that will not format correctly on a mobile device. On the course page we will display a truncated section of the text and allow the full text and images to be seen in an information popup which can be scrolled if the layout is not suited to the mobile.

Summary information

Label	Displays the full HTML of the label
-------	-------------------------------------

4.2.6.13.4 Unsupported Resource (ID 08)

Topic - Unsupported resource



Standard Moodle Mobile summary information will be used for unsupported resources.

4.3 Totara Lite Development

4.3.1 Systems

The functionality described in this section of the document is based on developing on Totara 2.4.

The administrator of the Totara site must enable both Moodle and Totara mobile access in Site administration > Plugins > Web services > Mobile by ticking the 'Enable web services for mobile devices' and 'Enable web services for Totara mobile devices' checkboxes, then click the button to save changes.

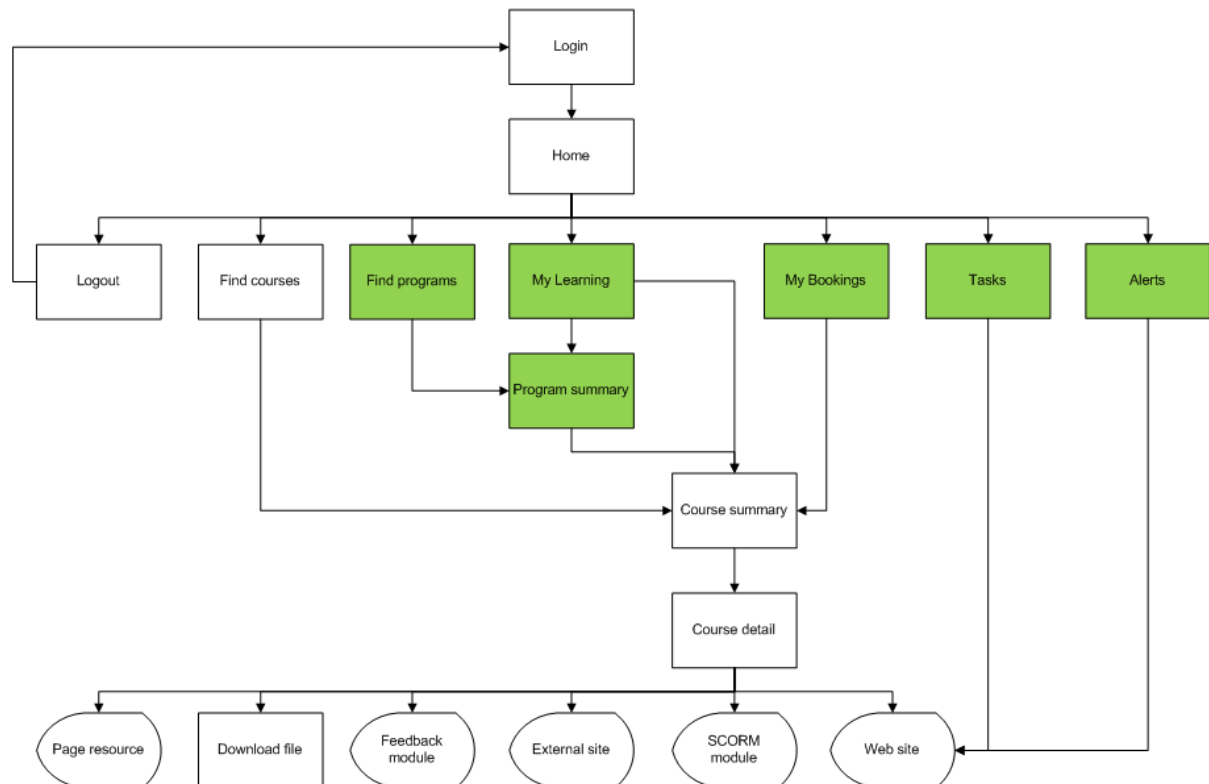
4.3.2 Key user journeys (Totara)

4.3.2.1 Learner

4.3.2.1.1 Overview

An overview of the application navigation is shown in the flow diagram below. Some of the items have sub-steps which are shown in more detail in their respective sections within this document. Green elements are Totara Lite functionality, the rest are Moodle Mobile.

Overview



4.3.2.2 Manager

Manager functionality is restricted to viewing and actioning direct report alerts and tasks. These will be displayed in the alerts and tasks screens as additional tasks and do not need their own specific pages.

4.3.2.3 Administrator

No administrator functionality is included in the Totara mobile app.

4.3.3 Key site pages (Totara Lite)

4.3.3.1 My Learning (ID 18, ID03)

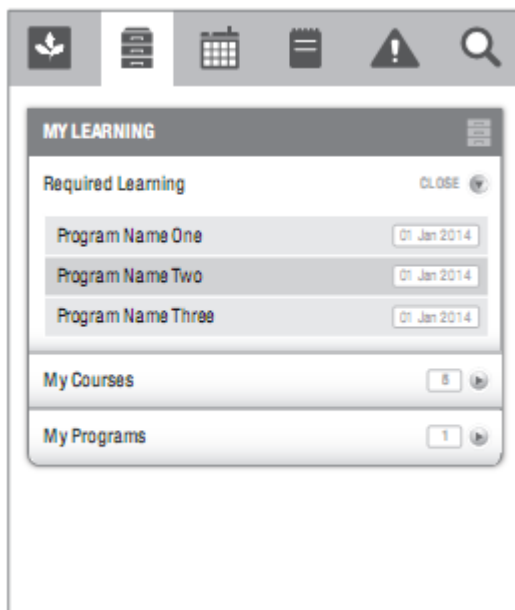
The My Learning page is developed as a container for lists of 'learning objects' within the application. Examples of learning objects are Face to Face bookings, Programs, Required Learning,

Courses. This My Learning page allows additional lists of information to be included in a single page as plugins are added to the app.

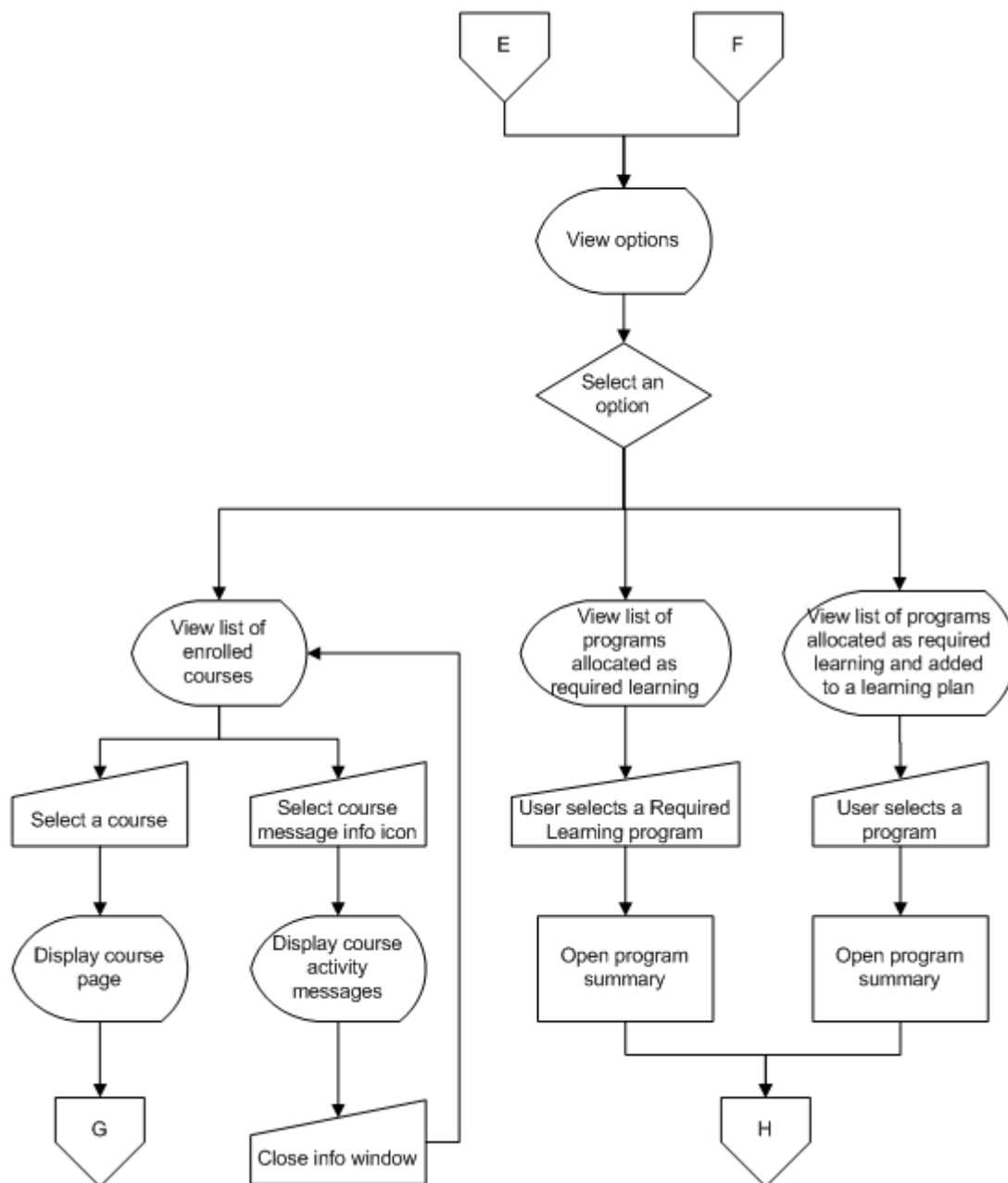
The My Learning page for Totara will display Required Learning, My Courses and My Programs. The Layout of this page allows for additional sections to be added if required at a later date. For Totara Lite this replaces the Moodle Mobile 'My Courses' page.

My learning (my homepage) displays the three main areas of - required learning (assigned programs), my courses and my programs.

Additional functionality can be added into the my learning block or as an additional or separate block (e.g. manager reports).



My Learning



4.3.3.1.1 Required learning

This displays a list of all programs allocated as required learning

4.3.3.1.2 My Courses

This displays a list of courses that the user is enrolled on or has been added to one of their learning plans.

4.3.3.1.3 My Programs

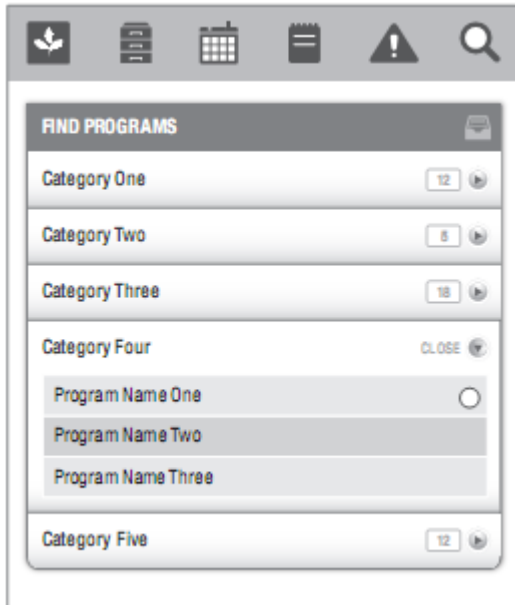
This displays programs that have been added to their learning plans and are allocated as required learning. Some items in this list will be duplicates of programs in the Required Learning section.

4.3.3.2 Find Programs (ID 04)

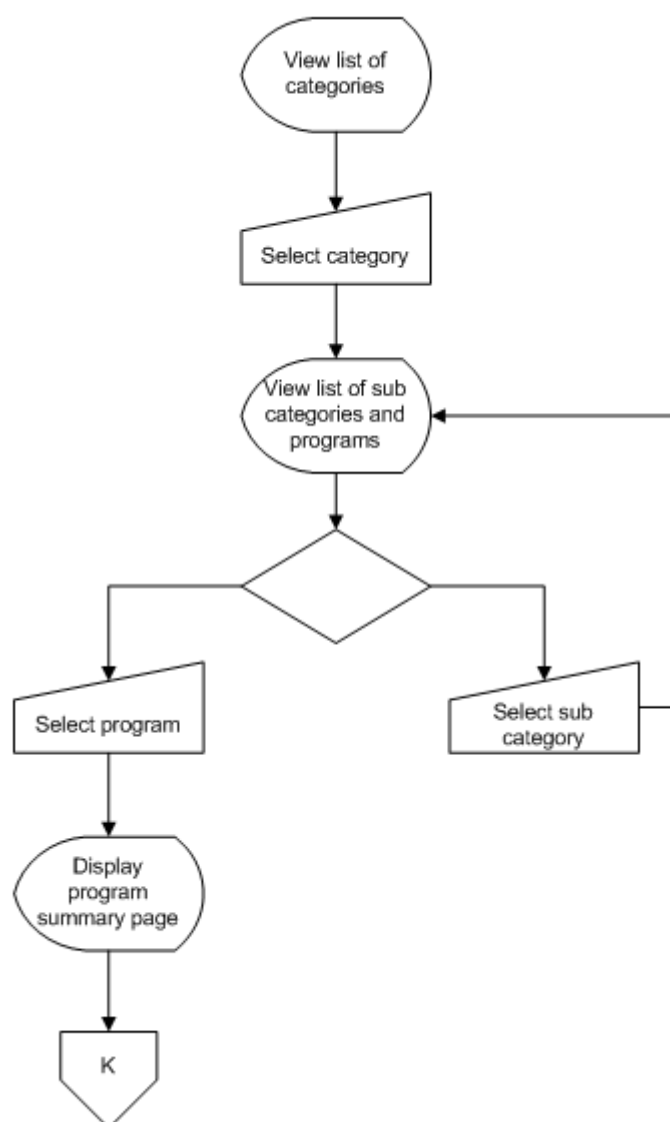
Each category is presented alongside an indication of the number of programs within the category.

Once a category has been expanded the number indication is replaced with a close label.

If a user is already enrolled on a program an indication of progress is displayed.



Find programs



4.3.3.3 Program summary (ID 19)

The return arrow icon takes the user back to the previously viewed screen.

Program name is displayed with dates, progress indication and program summary.


Program sets are displayed as expand/collapse sections. When collapsed, sets are presented with an indication of the number of courses within the set.


Locked sets are shown with a padlock but the section can still be expanded to see the courses within.

Once a set has been completed and the section collapsed, the number indicator is replaced with a complete icon.

The wording of dependencies and completion criteria between sets has been greatly simplified.

The program end note is displayed at the bottom.





Program Name One

Start date: 11 June 2013
 Due date: 1 January 2014
 Progress:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas mattis
 lacus quis turpis fermentum pulvinar. Duis sollicitudin libero turpis, eu
 scelerisque enim ullamcorper.



PROGRAM CONTENT



Set Name One
CLOSE


You must complete all courses in this set before proceeding

Course Name One

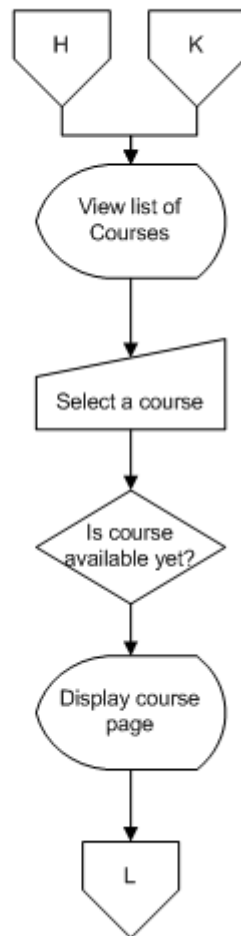
☐

Set Two Name



Set Three Name



Program End Note : Lorem ipsum dolor sit amet, consectetur adipiscing elit.
 Maecenas mattis lacus quis turpis fermentum pulvinar. Duis sollicitudin libero
 turpis, eu scelerisque enim ullamcorper.

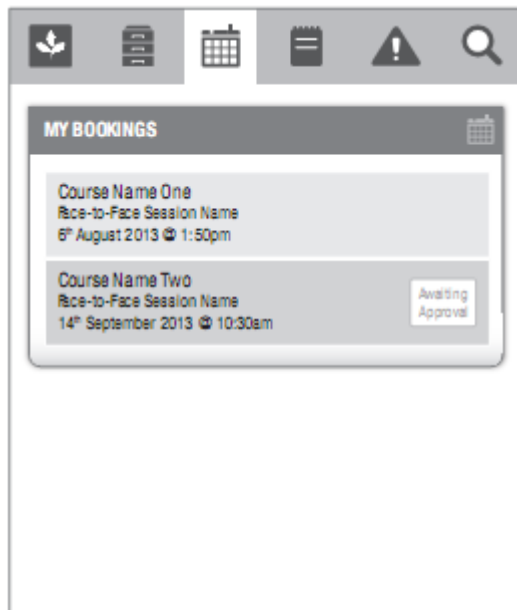
Program summary



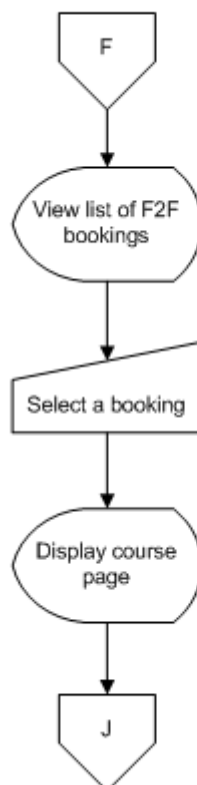
4.3.3.4 My Bookings (ID 29)

My bookings are accessible from either the main menu or short-cuts menu bar.

The page displays future bookings only and any bookings that are awaiting approval are clearly labelled.



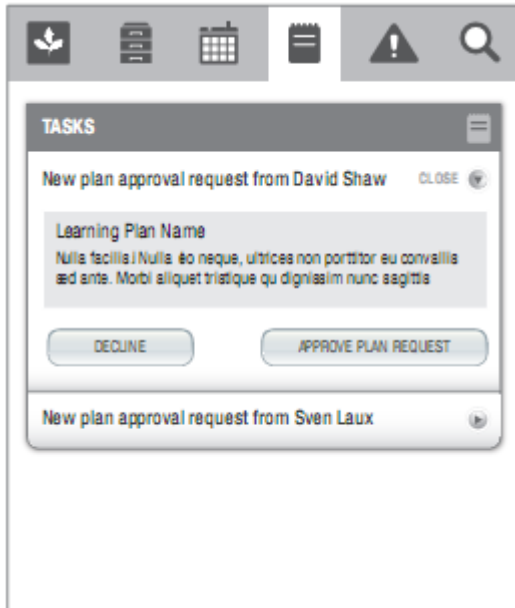
My bookings



4.3.3.5 Tasks (ID22, 23, 26, 27, 28)

Tasks are accessible from either the main menu or short-cuts menu bar.

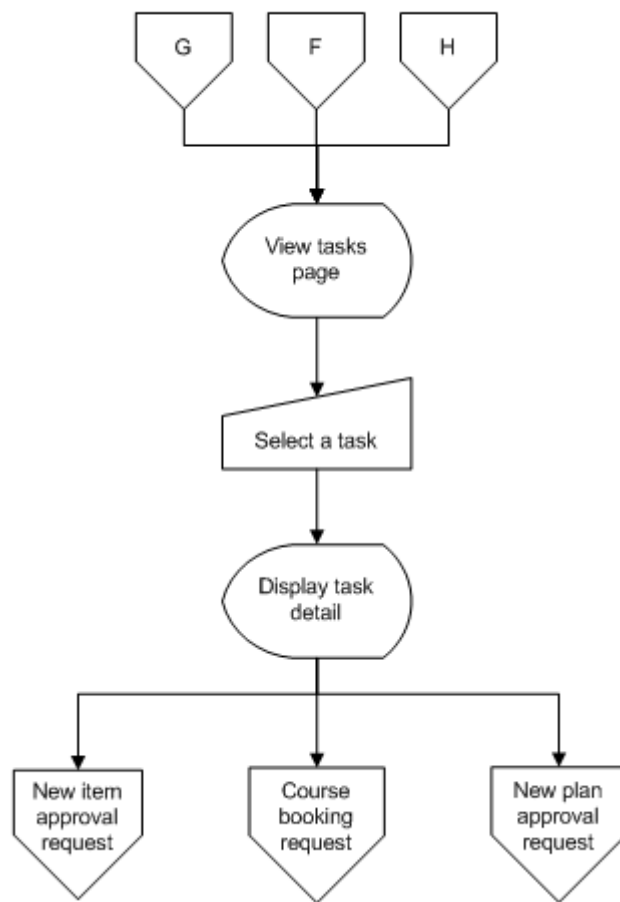
Each task can be expanded to view more details and associated actions (i.e. decline or approve plan request).



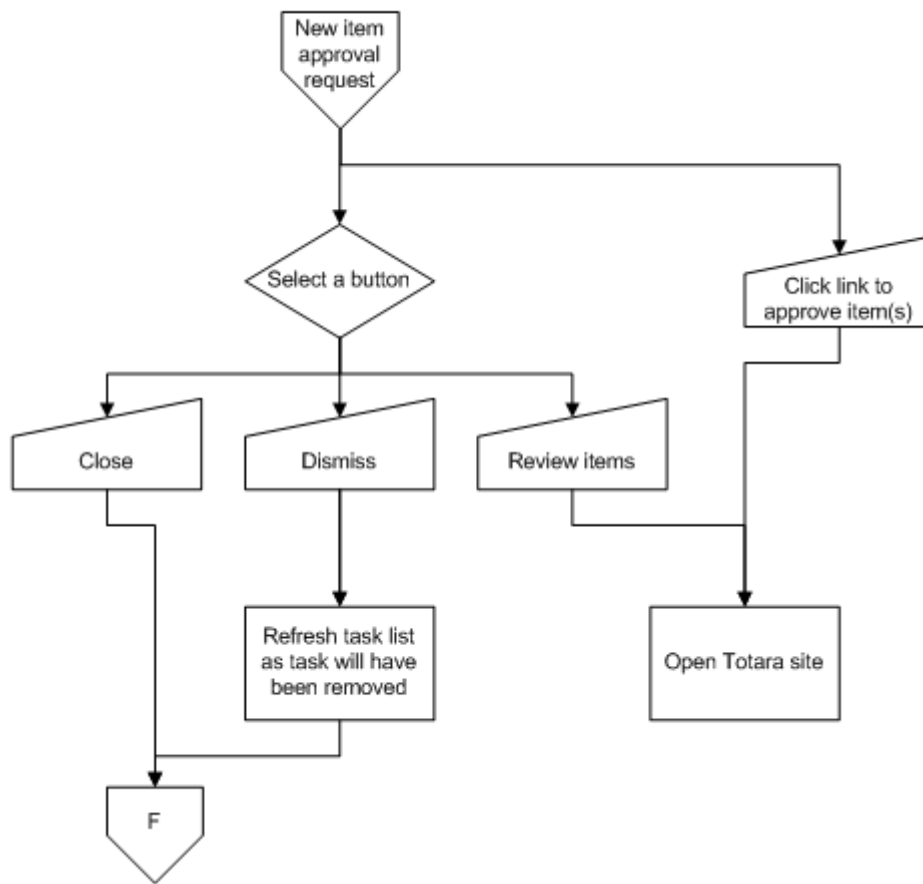
For 'new plan approval' where approval does not require access to the Totara site we will show the option to approve/decline in the app.

Where review is needed which requires access to Totara to approve/decline we will include links to open the main Totara site.

Tasks

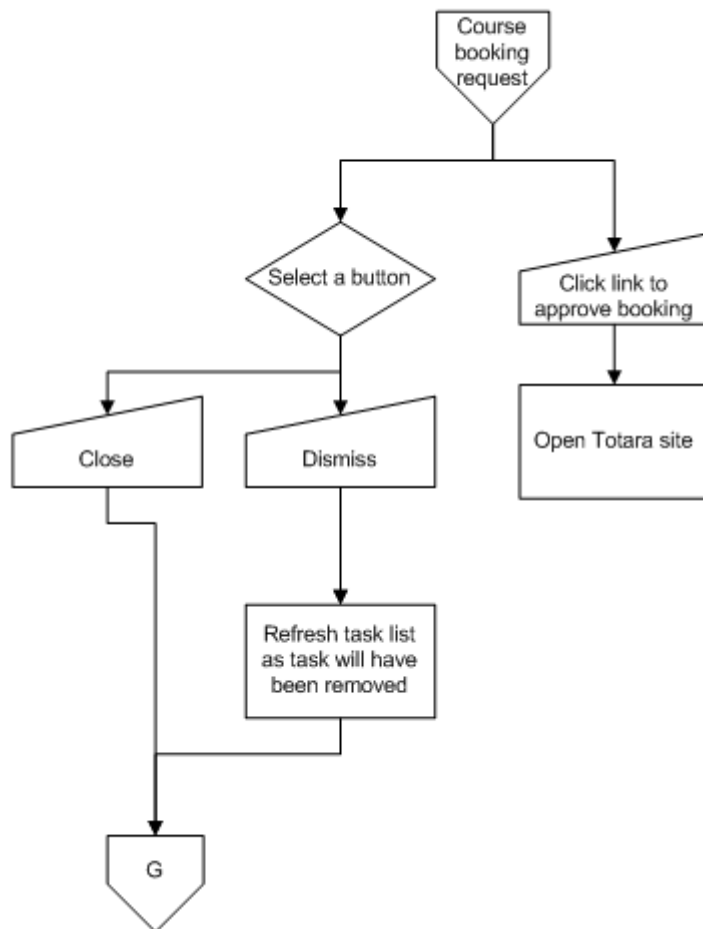


Task - New item approval request



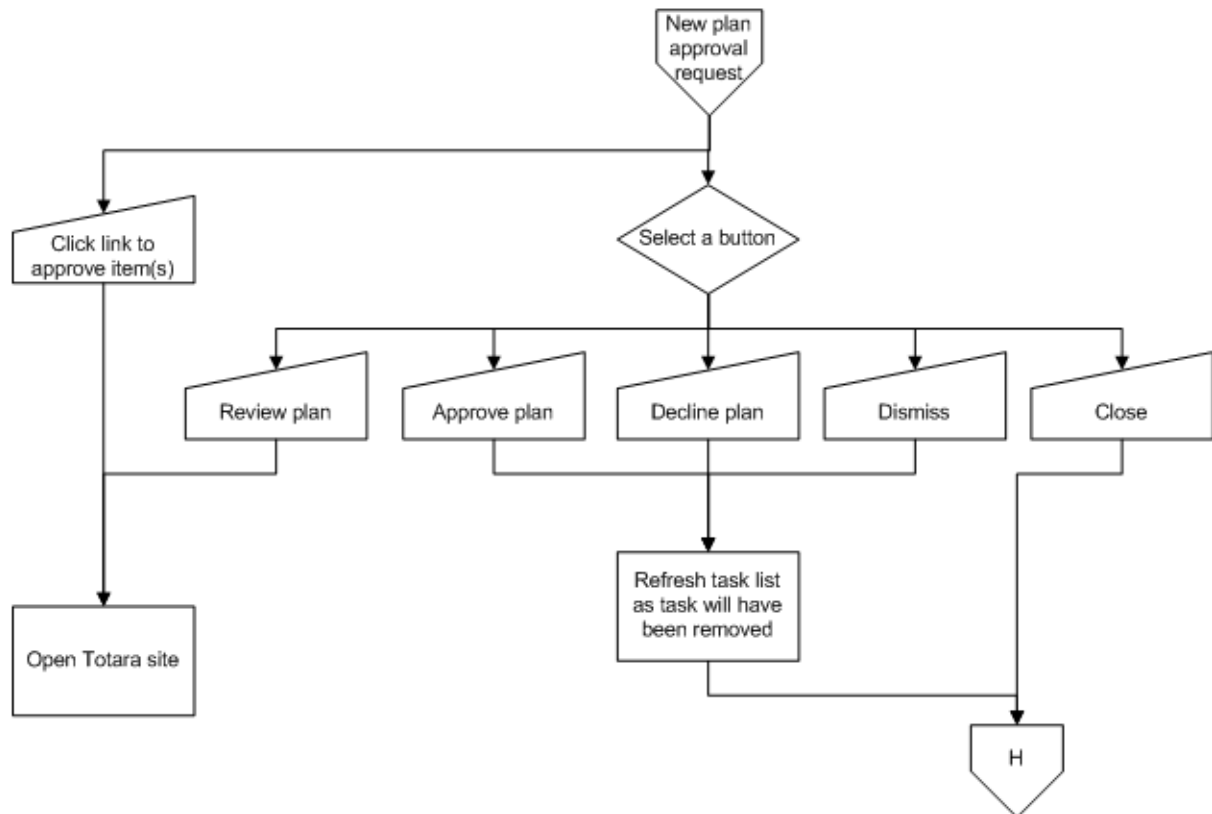
4.3.3.5.1 Course booking request

Task - Course booking request



4.3.3.5.2 New plan approval request

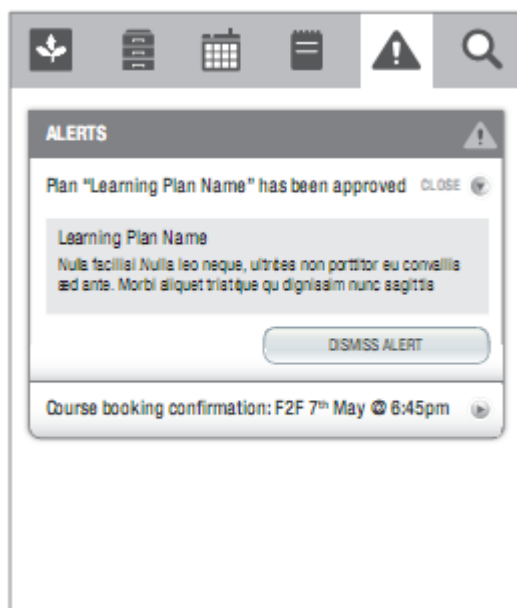
Task - New plan approval request



4.3.3.6 Alerts (ID 20, 21, 24, 25, 28)

Alerts are accessible from either the main menu or short-cuts menu bar.

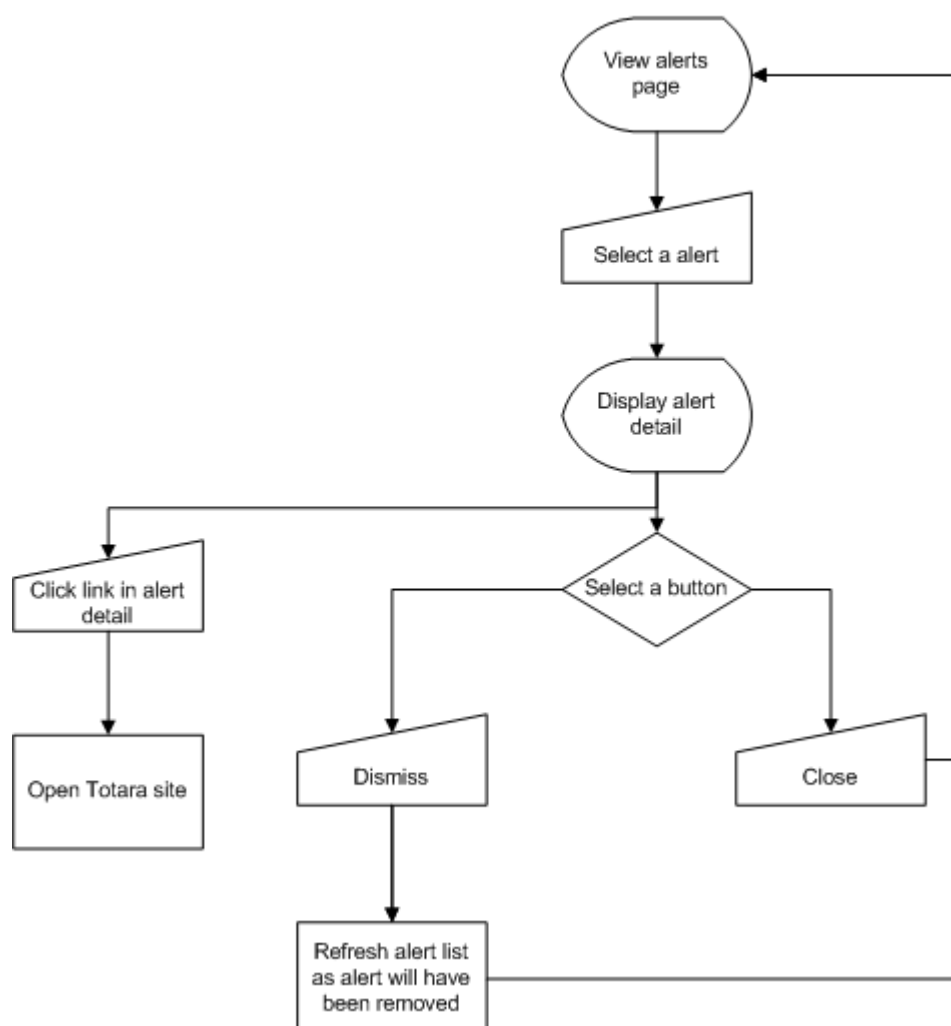
Each alert can be expanded to view more details and the associated “dismiss” action.



Alerts only require the recipient to confirm that they can be removed (dismissed) from the list of messages. The following messages are currently sent by Totara:

- User was deleting their own plan, notify their manager
- Someone else was deleting the learner's plan, notify the learner
- Manager creates a plan for a learner
- Manager reactivates a learning plan, notify the learner
- Learner has reactivated a plan, notify the manager

Alerts



4.3.3.7 Activities

The table below lists activities types within Totara in addition to the standard Moodle activities and indicates which will be available within the Mobile application.

Totara Activity	Mobile compatible
Face-to-face	No

4.3.4 Navigation

4.3.4.1 Menu Bar

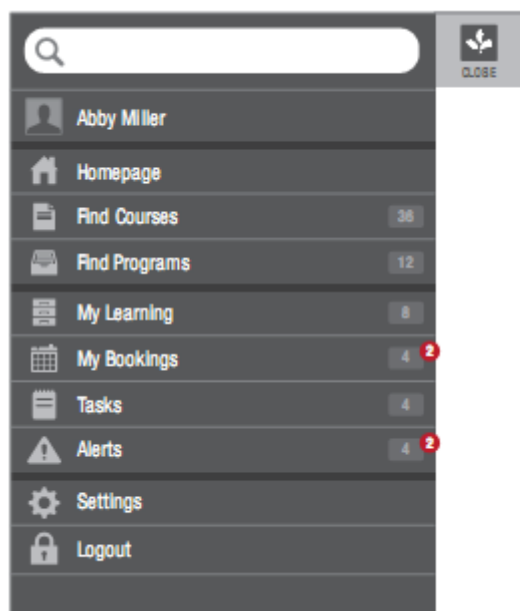
The Menu bar will contain links to the following areas of the site:

- Home
- My Learning
- My Bookings
- Tasks
- Alerts

4.3.4.2 Main Menu

Totara Lite will display the following items in the main menu in addition to the standard Moodle Mobile items:

- Find Programs
- My Learning
- My Bookings
- Tasks
- Alerts



Find courses and find programs are displayed with an indication of the number of course and programs that each section contains.

My learning, my bookings, tasks and alerts show an indication of the number items within each section and highlights the number of items that require attention.

4.4 Moodle development

4.4.1 Home page content

We will add an area to enter HTML content into the Mobile settings page [Site administration/Plugins/Web services/Mobile]. This will allow the admin to set the content displayed on the Mobile app home page.

4.4.2 Flag content as suitable for mobile devices (ID 10)

The requirement is to only flag SCORM activities as suitable for the smartphone / tablet / both, however we will extend this functionality to include all activities and resources to future proof the development.

We will add the ability to set activities and resources as Mobile suitable at the activity/resource level in the 'Common module settings' section found in all activity and resource settings pages. We will disable the option to set this if mobile devices are not enabled at the site level to reduce confusion for administrators.

The default for suitability is set to 'No' by default.

Auto-continue* ?
No

Common module settings

Visible
Show

ID number ?

Suitable for smartphone
Yes

Suitable for tablet
No

Activity completion

Completion options locked
One or more students (2) has already marked this activity as completed. Changing completion options

4.4.3 Web services

The administrator of the Totara site must enable mobile access in Site administration > Plugins > Web services > Mobile by ticking the 'Enable web services for mobile devices' and 'Enable web services for Totara mobile devices' checkboxes, then click the button to save changes.

Additional REST web services will be added to Moodle and Totara as required.

4.5 Logging

Logging is very important for the support of the application and is necessary for the investigation of issues when they arise.

The existing Moodle has logging at the web service API call level as well as within the Mobile application. New functionality will make use of the existing reporting methods currently used.

4.5.1.1 Moodle

Web service function calls are recorded with user and IP e.g.

Moodle24	Thu 6 June 2013, 2:44 PM	127.0.0.1	David Shaw	webservice core_course_get_contents	127.0.0.1
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4.5.1.2 Web app

The Mobile application has the ability to email logs e.g. device information etc to a named administrator if the user experiences issues.

4.6 Themes

4.6.1.1 Mobile app (ID 30)

The theme will be customised using the existing ability to pull a css file from the main site to customise the app interface.

4.6.1.2 Totara

A basic mobile theme should be applied to the Totara so that links to the main site take users to pages that are better formatted for a mobile device than the standard large format themes. It should be noted that current mobile themes do not work well with some Totara functionality e.g. learning plans and therefore this is something that will benefit Moodle sites more than Totara sites.

4.7 Roles & permissions

No additional roles or permission are required for the main Moodle site.

4.8 Help files

Help items will pull in the standard Totara text for the help item text. Where require additional language strings will be added.

4.9 Web services

A list of current web services can be found here:

http://docs.moodle.org/dev/Web_services_Roadmap#Naming_convention

The road map for new web services is found here: <https://tracker.moodle.org/browse/MDL-29934>

Existing Moodle Mobile API calls

Where the Mobile app is using depreciated web service calls, we will update them to use the newer versions of the calls.

The following list of web services used by Moodle Mobile are marked as depreciated in the Moodle documentation:

moodle_user_get_users_by_id

moodle_user_get_users_by_courseid
moodle_user_get_course_participants_by_id
moodle_enrol_get_enrolled_users
moodle_enrol_get_users_courses
moodle_message_send_instantmessages
moodle_notes_create_notes
moodle_webservice_get_siteinfo

4.10 Languages

The default language used is the default main site language setting. Individual language settings will be set when the user has logged in and we can then pull the correct language strings from the main site. All language strings are pulled from the main site allowing the standard Moodle translation functionality to be available to the administrator.

We will initially develop the site in English only.