



Adding a custom course format to Moodle Mobile

Mark Johnson, The Open University

About this talk

- The OU is adopting the Moodle Mobile app, to find out more go and see Davina's talk (1:30, International Suite).
- Technical Talk
- Lots of code snippets – sadly not on GitHub as this isn't part of a public plugin.
- Happy to discuss in detail 1 on 1, come find me or tweet @marxjohnson, I'm also in the Dev Chat Telegram channel.
- Big, enourmous thanks to Juan, Dani and all the HQ mobile team.

The OU Study Planner

AA100-18J Ho... Assessment Tutorials Forums Resources News Help ? Search AA100-18J

AA100 18J | The arts past and present

5%

Current weeks All weeks EXPAND ALL

WEEK 23 Book 3: Cultural Encounters 23–29 March 0 of 9 completed

WEEK 24 Assignment Week 30 March – 5 April 0 of 1 completed

Assignment Booklet

Assignment: TMA 06 (cut-off date Fri 5 Apr)

Tutor Anon ymous Contact your tutor

News

Community News

Student Hub Live (SHL) event: Opening up Classical Studies (ACE at the OU)

Approach

- CoreCourseFormatDelegate (mostly)
- Angular/Ionic templates
- Vanilla javascript
- You can mix in Mustache too, if you're so inclined.
- Not a custom build of the app.

Adding a course format – db/mobile.php

```
$addons = [  
    'format_oustudyplan' => [  
        'handlers' => [  
            'oustudyplan' => [  
                'delegate' => 'CoreCourseFormatDelegate',  
                'method' => 'mobile_course_view',  
                'styles' => [  
                    'url' => $CFG->wwwroot . '/course/format/oustudyplan/mobile_css.php',  
                    'version' => 2019032100  
                ],  
                'displaysectionselector' => false,  
                'displayenabledownload' => false,  
                'init' => 'oustudyplan_init'  
            ],  
        ],  
    ],  
];
```

Custom icons

course/format/oustudyplan/mobile.css

```
.format-oustudyplan .item-media .core-module-  
icon {  
    display: block;  
    box-sizing: border-box;  
    background-size: contain;  
    background-repeat: no-repeat;  
    width: 24px;  
    height: 24px;  
    padding-left: 24px;  
}format-oustudyplan .core-module-icon[src="assets/  
img/files/spreadsheet-64.png"] {  
    background-image: url(@@WWWROOT@@/path/to/  
icon.svg);  
}
```



Mathjax-performance



My questionnaire



Test Wiki



Glossary



Test Questionnaire



bzsdfbdzafbzdf



afdsd

Study planner page – main template

```
<ng-container *ngIf="CONTENT_OTHERDATA.area
  || selectedSection === ALL_SECTIONS_ID">
  <ng-container *ngFor="let section of sections">
    <ng-container
      *ngIf="CONTENT_OTHERDATA.displaysections.hasOwnProperty(
        section.id.toString())">
      <ng-container *ngTemplateOutlet="sectionDisplay;
        context:{section:section}">
      </ng-container>
    </ng-container>
  </ng-container>
</ng-container>
```

Study planner – section ordering

- Week 1
- Week 2
- Subpage in week 2 – section 1
- Subpage in week 2 – section 2
- Week 3
- Week 4
- ...
- Assessment page – section 1
- Assessment page – section 2
- Forums page – section 1
- ...

Week 1 (6–12 Oct) Preparatory Week

Book: Study Companion

 [Student Welcome Letter 2018J](#)

 [Tuition on AA100 - The Arts Past and Present](#)

Hidden from students

 [Getting Started at the OU](#)

Week 2 (13–19 Oct) Book 1: Reputations

Chapter 1: Cleopatra

DVD Video: Cleopatra

 [Book 1 DVD Videos](#)

View the video relating to Cleopatra

Dummy assignment

Study planner – selectively display sections

mobile_course.mustache

```
<ng-container *ngIf="CONTENT_OTHERDATA.displaysections.hasOwnProp  
    section.id.toString()">  
    <ng-container *ngTemplateOutlet="sectionDisplay;  
        context:{section:section}">  
    </ng-container>  
</ng-container>
```

format/outstudyplan/output/mobile.php

```
$sections = sections::get_normal($course);  
...  
foreach ($sections as $section) {  
    $displaysections[$section->id] = self::get_section_heading($section);  
}  
...  
$otherdata => ['displaysections' => json_encode($displaysections)];
```

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Dummy assignment



Study planner – display course modules

```
<ng-template #sectionDisplay let-section="section">
  ...
  <ion-item text-wrap *ngIf="section.summary">
    <core-format-text [text]="section.summary"></core-format-text>
  </ion-item>

  <ng-container *ngFor="let module of section.modules">
    <ng-container *ngIf="module.visibleoncoursepage !== 0">
      <core-course-module text-wrap *ngIf="module.modname !== ..."
        [module]="module" [courseId]="course.id"
        [downloadEnabled]="1"
        (completionChanged)="onCompletionChange($event)">
      </core-course-module>
    </ng-container>
  </ng-container>
</ng-template>
```

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Dummy assignment



Study planner – repeat activities

 [Student Welcome Letter 2018J](#)  (Item is repeated)

 [Student Welcome Letter 2018J](#) (Repeat)

[AA100-18J Home](#) > [Resources](#) > [Student Welcome Letter 2018J](#)

This item is also available in [Week 1](#).

Student Welcome Letter 2018J

Click on the link below to open this item.

 [Student Welcome Letter 2018J](#)

Study planner – repeat activities

mobile_course.mustache

```
<ng-container *ngIf="module.modname === 'repeatactivity'
  && CONTENT_OTHERDATA.repeatmap[module.id]">
  <ng-templateOutlet="repeatActivity;context:{module:module,
    original:CoreUtilsProvider.oustudyplanUtils.getRepeatActivity(
      this, CONTENT_OTHERDATA.repeatmap[module.id])}">
  </ng-container>
</ng-container>
```

coursepage_init.js

```
getRepeatActivity: function(page, mappedRepeat) {
  ...
  var sectionIndex = page.sectionMap.indexOf(mappedRepeat.sectionnum);
  var section = page.sections[sectionIndex];
  ...
  var moduleIndex = page.moduleMap[section.id].indexOf(mappedRepeat.originalcmid);
  return section.modules[moduleIndex];
},
```

 Useful Websites

Week 22 (16–22 Mar) Book 3: Cultural Encounters

Chapter 5: From Greece to the Middle East to Europe: the Transmission of Medical Knowledge

 Useful Websites

 Medieval Islamic medicine podcast

 Bloodletting podcast (optional)

Week 23 (23–29 Mar) Book 3: Cultural Encounters

Chapter 6: Seamus Heaney's *The Burial at Thebes*

Audio CD: *The Burial at Thebes* Parts 1 and 2;
The Burial at Thebes Interviews

 The Burial at Thebes – Part 1 (MP3 audio files)

 The Burial at Thebes – Part 2;

Subpages



Bloodletting podcast (optional)

Bloodletting podcast (optional)

*Restricted: Not available unless: The activity **Bloodletting podcast (optional)** is available (hidden otherwise)*

In this short audio recording, Helen King (Professor of Classical Studies at The Open University) explores bloodletting, an important form of medical treatment from ancient times to the Renaissance. She discusses why doctors prescribed bloodletting, how it was carried out, and some of the debates around the procedure.

This audio recording is an optional exercise which will help to reinforce what you have learned about Islamic and European medicine.

You can use the onscreen player to listen to the audio or you can right-click the link to download the mp3 file.

Bloodletting

Download the mp3 file



(12:23 mins, 12.5 MB)



Transcript

Subpages

mod/oustudyplansubpage/db/mobile.php

```
$addons = [  
    'mod_oustudyplansubpage' => [  
        'handlers' => [  
            'oustudyplansubpage' => [  
                'delegate' => 'CoreCourseModuleDelegate',  
                ...  
                'method' => 'mobile_subpage_view',  
            ]  
        ]  
    ]  
];
```

mod/oustudyplansubpage/output/mobile.php

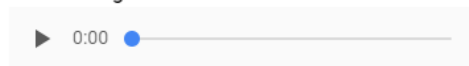
```
public static function mobile_subpage_view($args) {  
    $course = get_course($args['courseid']);  
    require_login($course);  
    $pageurl = new \moodle_url('/course/view.php',  
        ['id' => $course->id, 'cmid' => $args['cmid']]);  
    return \format_oustudyplan\output\mobile::subpage($course,  
        \format_oustudyplan\sections::get_owned($course, $args['cmid'],  
        $pageurl);  
}
```

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Bloodletting



(12:23 mins, 12.5 MB)

 [Transcript](#)



Subpages

course/format/oustudyplan/output/mobile.php

public static function subpage(...) : array {

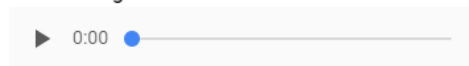
```
...
    $displaysections = [...];
    $html = $OUTPUT->render_from_template('format_oustudyplan/mobile_course',
        []);
    ...
    return [
        'templates' => [
            [
                'id' => 'subpage',
                'html' => $html
            ]
        ],
        'javascript' => file_get_contents($CFG->dirroot
            . '/course/format/oustudyplan/appjs/subpage.js'),
        'otherdata' => [
            'displaysections' => json_encode($displaysections),
        ]
    ]
}
```

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Bloodletting



(12:23 mins, 12.5 MB)

 [Transcript](#)



Area pages

[AA100-18J Home](#) [Assessment](#) [Tutorials](#) [Forums](#) [Resources](#) [News](#)

AA100-18J Home > Resources



Resources

 [AA100-TUTOR website](#)
Hidden from students

 [Forums](#)
Hidden from students

 [AA100 FAQs](#)

Area pages

course/format/oustudyplan/db/mobile.php

```
'assessmentpage' => [  
    'delegate' => 'CoreCourseOptionsDelegate',  
    'method' => 'assessment_page',  
    'displaydata' => [  
        'title' => 'special_assessment',  
        'class' => 'oustudyplan-area'  
    ],  
    'priority' => 100,  
    'init' => 'assessment_init'  
],  
'tutorialspage' => [  
    ...
```

[Planner](#) [Assessment](#) [Tutorials](#) >

 [Resit and resubmission resources](#) >

[ASSESSMENT STRATEGY](#)

[ASSESSMENT ADVICE](#)

 [Assessment information for Arts Level 1 modules](#) 

 [Assessment Handbook Undergraduate Courses](#) 

 [Assignment Booklet](#) 

Your assessment scores are not currently displayed on this page. Your overall scores are available from the [Study Record](#) pages in your Profile.

 **TMA 01**
Week 5
9 Nov

Group: AA100-18J variant group

 **TMA 02**
Week 9

Area pages

`course/format/oustudyplan/output/mobile.php`

```
public static function assessment_init(array $args) : array {  
    global $CFG;  
    return [  
        'restrict' => [  
            'courses' => self::get_courses_showing_area($args['userid'],  
                areas::SPECIAL_ASSESSMENT)  
        ],  
        'javascript' => file_get_contents($CFG->dirroot .  
            '/course/format/oustudyplan/appjs/areapage.js')  
    ];  
}
```

Planner

Assessment

Tutorials



Resit and resubmission resources

ASSESSMENT STRATEGY

ASSESSMENT ADVICE



Assessment information for Arts Level 1 modules



Assessment Handbook Undergraduate Courses



Assignment Booklet

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TMA 01
Week 5
9 Nov

Group: AA100-18J variant group



TMA 02
Week 9

moodle moot

Area pages

```
<ion-item-divider *ngIf="CONTENT_OTHERDATA.progress" class="oustudyplan-
...
</ion-item-divider>
<ion-item *ngIf="CONTENT_OTHERDATA.upcomingevents">
...
</ion-item>
<ng-container *ngIf="CONTENT_OTHERDATA.area && CONTENT_OTHERDATA.a
  <ng-container *ngTemplateOutlet="assessmentArea"></ng-container>
  <core-format-text [text]="CONTENT_OTHERDATA.abovesections.html"></core
</ng-container>
<ng-container *ngIf="CONTENT_OTHERDATA.area && CONTENT_OTHERDATA.a
  <ng-container *ngTemplateOutlet="forumsArea;context:CONTENT_OTHERDA
</ng-container>
<ng-container *ngIf="CONTENT_OTHERDATA.area && CONTENT_OTHERDATA.a
  <ng-container *ngTemplateOutlet="tutorialsArea;context:CONTENT_OTHERD
</ng-container>
<ng-container *ngIf="CONTENT_OTHERDATA.area && CONTENT_OTHERDATA.a
  <ng-container *ngTemplateOutlet="resourcesArea;"></ng-container>
</ng-container>
```

[Planner](#)[Assessment](#)[Tutorials](#)[Resit and resubmission resources](#)[ASSESSMENT STRATEGY](#)[ASSESSMENT ADVICE](#)[Assessment information for Arts Level 1 modules](#)[Assessment Handbook Undergraduate Courses](#)[Assignment Booklet](#)

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TMA 01
Week 5
9 Nov

Group: AA100-18J variant group



TMA 02
Week 9

 **moodle**moot

Things I didn't have time to talk about...

- Section selector
- App-specific filter behaviour
- News page
- Event dates

← AA100-17J The arts past and pr... ⋮

Planner

Assessment

Tutorials

>

1%

All weeks ▾

Week 0 Introductory forums

Introductory forums

🔗

Introductions and help

🔗

Module topics discussion

🔗

General chat

🔗

Introductory forums quarantine

Hidden from students

Week 1 (7–13 Oct) Preparatory Week

Book: Study Companion ✓

📄

Student Welcome Letter 2017J

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