AppShed App Creation - Scheme of Work

Preliminary notes

Cambridge Nationals unit R005 requires students to work to a pre-defined brief as set by the exam board. Alterations to this brief are allowed, but the resources here are deliberately designed for a different brief in order to help students learn about and explore the use of Appshed to create apps with the aim of working towards the actual project brief independently.

Creative iMedia unit 210 allows students to work towards a centre-set brief. Students could either complete the brief set out here and submit or submit their work towards the R005 unit. In order to avoid unneccessary repetition it is expected that this brief would be tackled as an exercise, allowing for me freedom for group work and teacher intervention and that the R005 project brief will be used for both assessments.

The Scheme of Work is broken down into practical tasks to get used to introduce Appshed and App creation (weeks 1, 2 & 3), knowledge tasks (week 4) and a summative assessment (weeks 5, 6 & 7).

In order to make the best use of student motivation and engagement it is suggested that the scheme begins with a heavily practical element.

A theme park project based on a relatively local resort (Chessington World of Adventures) provides the project brief, with the tasks being broken down as follows (information in brackets refers to approximate LO mapping for each qualification, although for the first 3 weeks the focus in on learning and not summative assessment).

Practical Project – Chessington World of Adventures

Week 1, Session 1
Introducing Appshed
(To Do: Create complete instructions/designs for 3 or 4 mobile apps)

- Students pick a pre-planned app idea and design
- Students follow the instructions to build a simple app
  - Allow plenty of opportunity to drift off original plan
  - Aim is to learn about using Appshed, not to create a working app

Week 1, Session 2
Chessington App Ideas (iMedia LO2, Nats LO1)

- Explore existing apps (Alton Towers, etc.)[1]
- Group exercise to identify requirements[2]
- Brainstorm (or thought shower!) ideas
- If time allows, start experimenting with ideas

Week 2, Session 1
Planning an App (iMedia LO2, Nats LO1)
(To Do: Create sample spider diagrams and designs as examplars)

- Use requirements as provided by client plus ideas from group work
- Identify screen & navigation structure
  - Storyboards
  - Sketches
- Decide on multimedia content (where to use pictures, etc.)

Week 2, Session 2
Creating an App (iMedia LO3, Nats LO2)
(To Do: Collect / source suitable app icons)

- Collate assets and upload to Appshed[3]
- Create screens and menus, with at least one of each:
  - Icon screens
  - Menu screens
  - Video
  - Map
  - Contact page
    - Web link
    - Email link
    - Phone link

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[1] Internet enabled smartphones required or the Android SDK and some APK files to emulate the apps on a PC (non-trivial to set up)
[2] Sample project Brief included
[3] Licensed Flickr images included, Chessington press office have been contacted re: use of their own still and moving images

Week 3, Session 1
Creating an App (iMedia LO3, Nats LO2)
(To Do: Collect / source suitable app icons)

- Collect informal feedback
- Sketch / write out ideas for how to complete the app – set targets
- Continue to work on app
- Add extension features, such as RSS feeds, Flickr extensions, etc.
- If time allows, plan, sketch and perhaps start to implement a second app

Week 3, Session 2
Testing an App (iMedia LO3, Nats LO3)
(To Do: Create resources for test plans)

- Create and complete test plans (both individual and peer)
- Use peer reviews to consider how to improve apps
- Make improvements

Theory and Knowledge – Evidence for iMedia Unit 210

Week 4, Session 1
Explore multimedia concepts
(To Do: Create resources to support this section)

- Research example mutimedia products - 1 website, 1 mobile app & multimedia kiosks (iMedia LO1.1)
- Describe the purpose and list advantages and disadvantages for each (iMedia LO1.2 & LO1.3)
- Identify hardware requirements for running each (iMedia LO1.4)

Week 4, Session 2
Continue to explore multimedia concepts
(To Do: Create resources to support this section)

- Identify software requirements for creating each (iMedia LO1.4)
- Identify bandwith limitations and download speeds for each (iMedia LO1.5)
- List suitable file formats for digital images, videos and sounds with appropriate media players that support those formats (iMedia LO1.6)

Week 5, Session 1
Plan

- Examine project brief and identify requirements (iMedia LO2.1, Nats LO1.1)
- List and justify appropriate software and presentation type (Nats LO1.2)
- Create a work plan / gantt chart (iMedia LO2.2, Nats LO1.2)
- Create a mind-map / navigation structure chart (iMedia LO2.3, Nats LO1.2)

Week 5, Session 2
Design

- Create storyboards and sketches, including house style (iMedia LO2.3 & 2.4, Nats LO1.2)
- Design background image in line with house style (iMedia LO2.3 & 2.4, Nats LO1.2)[4]
- Identify assets – choose images, videos and icons (iMedia LO2.5, Nats LO1.2)
- List copyright implications of sourced assets (iMedia LO2.6, Nats LO1.2)

Week 6, Session 1
Create

- Source / collate the chosen assets (iMedia LO3.1, Nats LO1.2)
- Create / modify background image (iMedia LO3.2)
- Create a new Appshed app and upload assets (iMedia LO3.3, Nats LO1.2)
- Create app structure (iMedia LO3.3, Nats LO2.1)
- Add content to the app (iMedia LO3.3, , Nats LO2.1)
- Formatively test the app before the end of the session (Nats LO3.1)
- Collect and record informal peer feedback – optional (Nats LO3.1 & LO3.2)

Week 6, Session 2
Create

- Add advanced features to the app - e.g. map screen, contact links (iMedia LO3.3, Nats LO2.1)
- Apply house style and formatting (iMedia LO3.3, Nats LO2.1)

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[4] In order to meet iMedia LO 3.2 it is necessary to create at least one asset for use in the app. A straightforward idea would be to create a suitable background image that would fit the house style and be included on every screen. Simple image editing with a logo and copyright notice would suffice as a minimum.

- Publish and test the app for basic functionality in browser and on a mobile device (preferably on iOS **&** Android) (iMedia LO3.4 & LO3.5, Nats LO3.1)
- Provide evidence of the app tree and file space, showing appropriate file names (iMedia LO3.6, Nats LO1.2)

Week 7, Session 1
Testing (iMedia LO3.7/3.8, Nats LO3.1)

- Collate evidence of testing during development (Nats LO3.1)
- Create test plan (iMedia LO3.7, Nats LO3.1)
- Complete test plan (iMedia LO3.7, Nats LO3.1)
- Provide evidence of any changes or corrections (iMedia LO3.8)

Week 7, Session 2
Project Review (iMedia LO4, Nats LO3.2)

- Collect summative feedback (iMedia LO4.1, Nats LO3.2)
- Produce review documents (iMedia LO4.1 – 4.5)
- Analyse feedback (Nats LO3.2)

Paul Smith
Public Relations
Director

Chessington World of
Adventures Resort
London
KS9 2NE

Sam Jones
Hackney UTC
Hackney
N1 6HQ

1st September, 2012

Dear Sam,

Given the increasing popularity of smartphones and the wide range of mobile apps available it has become clear that, as one of the largest theme parks in the country, we would benefit from having an app aimed at potential visitors to the resort.

I would like you to design and build a mobile phone application for us. The application should include an interactive map to help visitors find us, details of some of the most popular rides and at least one contact link (e.g. a link to visit the park's website, send us an email or to phone our customer services number direct from the app).

The app should also include some photos of the park as well as our latest television commercial (we can supply these).

The app should work on both the iOS and Android platforms and it is vital we have permission for all of the media files you want to include so please provide us with a list of sources and copyright details.

I look forward to hearing from you soon,

Paul Smith

Paul Smith

Public Relations Director

Appendix 2 - Copyright Issues

All photos of Chessington World of Adventure Resort were taken from the Flickr account of Roller Coaster Philosophy and are released under a Creative Commons Attribution 2.0 Licence. This means that anyone is able to use them, including for commercial purposes and re-editing, as long as Roller Coaster Philosophy is noted as the source of the images. In terms of providing resources for Hackney UTC or other educational centres this means that this paragraph and the link below are sufficient to meet the terms of the license. For students' work they should reference the source of the images both in their writeup and in the app itself (perhaps adding a copyright notice into the background design for the app).

http://www.flickr.com/photos/rollercoasterphilosophy/

Appendix 3 – Sample Multimedia Products

Some example sources of existing multimedia products, particularly useful for the Explore (LO1) tasks for the iMedia course, as tackled in week 4.

Instructional website - http://www.mariaclaudiacortes.com/colors/Colors.html

Instructional website - http://www.bbc.co.uk/schools/gcsebitesize/ict/system/ictsystem_act.shtml

Multimedia website - http://www.converse.com/#/products/shoes/converseOne/scratch/all

Multimedia website - http://www.buffalobillsteakhouse.com/

Multimedia kiosk information - http://www.rockmedia.com/index.html

Mobile phone apps - https://play.google.com/store

Appendix 4 – iMedia specific resources

These are the documents that would be sumbitted for the OCR iMedia course. The majority of the following have templates included.

LO1 (Explore)

- Explore evidence (Template: 1.1 Researching Multimedia Products)

LO2 (Plan)

- Planning evidence (Template: 2.1 Planning)
- Gantt chart (Template 2.2 Gantt)
- *Navigation structure **
- *House style **
- *Storyboard **
- *Mood board (optional) **

  Probably hand drawn, no template provided

LO3 (Create)

- Creation evidence (Template: 3.1 Creation)

LO4 (Review)

- Review evidence (Template: 4.1 Review)