# Information and Communication Technology 2019 v1.0

## Unit 4 assessment instrument

### Extended response – Mobile Application Proposal

|  |
| --- |
| **Purpose** |
| This technique assesses the interpretation, analysis/examination and/or evaluation of ideas and  information in provided stimulus materials. While students may undertake some research in the writing of the extended response, it is not the focus of this technique. |
| **Dimensions to be assessed** |
| This assessment technique is to be used to determine student achievement in objectives from all of the following dimensions:   * Knowing and understanding * Analysing and applying * Producing and evaluating.   Not every objective from each dimension needs to be assessed (ICT syllabus page 38).  Given the syllabus rules and the nature of this task, the objectives **P&E2** (production of solutions) and **A&A3** (application of software and hardware concepts, ideas and skills) will **not** be assessed. |

|  |  |
| --- | --- |
| **Subject** | Information and Communication Technology |
| **Technique** | Extended Response – written |
| **Unit number** | 4 |
| **Module number and name** | Module 7: Mobile Applications |
| **Conditions** | |
| **Length** | 600-1000 words |
| **Duration (including class time)** | 3 weeks |
| **Individual / group** | Individual |
| **Resources available** | Laptop, software and internet access |
| **Context** | |
| Cross-platform mobile application development has been made easy thanks to products such as Phonegap and Xamarin, that allow developers to code in their native language (such as JavaScript or C#) and export applications to a range of targe platforms. This shifts the focus of development to planning functionality in either a web or native UI, with most phone features and functionality being supported by both, allowing developers to reuse code and decrease time consumption. | |
| **Task** | |
| Develop a mobile application proposal for a mobile device application that could be of measurable social benefit to local residents. | |
| **To complete this task, you must:** | |
| * identify and explain the software and hardware requirements relevant to developing your proposed mobile application (K&U1) * identify and explain how your proposed mobile application will be used and received in society (K&U2)   + *identify and explain how your proposed mobile application has measurable social benefit* * analyse the requirements, risks and problems with developing, deploying or maintaining your mobile application, and identify potential solutions, alternatives or mitigation strategies (A&A1)   + *apply the suggested technique for analysis: mind-map* * synthesise concepts and ideas from your analysis to plan *storyboard illustrations* for your proposed mobile application (P&E1)   + *communicate to the reader how your mobile application works via annotations* * evaluate the mobile application proposal and the design process, and make recommendations or offer advice for future directions or potential where feasible (P&E3) * communicate ICT information to the intended audience using a considered selection of visual representations and language conventions and features (A&A2) | |
| **Checkpoints** | |
| □ Term [X] Week [X]: Discuss ideas with teacher | |
| □ Term [X] Week [X]: Complete draft submission | |
| □ Term [X] Week [X]: Final submission | |
| **Authentication strategies** Your teacher will use ways to check that the work you are assessed on is your own work. | |
| * Discuss with your teacher or provide documentation of your progress. | |
| * Take part in interviews or consultations with your teacher as you develop your response. | |
| * Submit drafts and respond to teacher feedback. | |

Instrument-specific standards matrix

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Standard A** | **Standard B** | **Standard C** | **Standard D** | **Standard E** |
| **Knowing and understanding** | The student work has the following characteristics: | | | | |
| * **accurate** identification and **comprehensive** explanation of software and hardware requirements related to ICT problems * **accurate** identification and **comprehensive** explanation of the use of ICT in society | * **accurate** identification and **detailed** explanation of software and hardware requirements related to ICT problems * **accurate** identification and **detailed** explanation of the use of ICT in society | * identification and explanation of software and hardware requirements related to ICT problems * identification and explanation of the use of ICT in society | * **partial** identification and **simple** description of software and hardware requirements related to ICT problems * **partial** identification and **simple** description of the use of ICT in society | * **minimal** identification and **superficial** description of software and hardware requirements * **minimal** identification and **superficial** description of the use of ICT in society |
| **Analysing and applying** | The student work has the following characteristics: | | | | |
| * **logical** analysis of ICT problems to identify solutions * **coherent** communication of ICT information to an audience using **a considered selection of** visual representations and language conventions and features | * **considered** analysis of ICT problems to identify solutions * **clear** communication of ICT information to an audience using **relevant** visual representations and language conventions and features | * analysis of ICT problems to identify solutions * communication of ICT information to an audience using visual representations and language conventions and features | * **description** of aspects of ICT problems * **vague** communication of ICT information to an audience using visual representations and language conventions and features inconsistently | * **partial description** of aspects of ICT problems * **unclear** statements of ICT information |
| **Producing and evaluating** | The student work has the following characteristics: | | | | |
| * **logical** synthesis of ICT concepts and ideas to **proficiently** plan solutions to given ICT problems * **reasoned** evaluation of problem-solving processes and solutions, and **logical** recommendations made. | * **effective** synthesis of ICT concepts and ideas to **successfully** plan solutions to given ICT problems * **considered** evaluation of problem-solving processes and solutions, and **plausible** recommendations made. | * synthesis of ICT concepts and ideas to plan solutions to given ICT problems * evaluation of problem-solving processes and solutions, and recommendations made. | * listing of related ICT concepts and ideas to **partially** plan solutions to given ICT problems * description of problem-solving processes and solutions, and **basic** recommendations made. | * collection of information related to planning solutions to given ICT problems * fragmented description of problem-solving processes and solutions, and statements of opinion made. |

### Comments: