|  |  |
| --- | --- |
| Assignment title | **17.1 Investigate Mobile Apps** |
| Assessor | Chris Livesey |
|  | |
| Date issued | 14/09/2020 |
| Final deadline | 09/10/2020 |
|  | |
| Qualification suite covered | BTEC L3 National Extended Diploma in Computing |
| Units covered | Unit 17: Mobile App Development |
| Learning aims covered | A: Investigate the principles of systems methodology and systems techniques used to solve computing problems |
|  | |
| Scenario | You have been hired as a software developer for a company called Retro Gaming. The company want to begin to develop game apps that can run on mobile devices.  As part of this new business focus you have been asked to investigate, analyse and evaluate how other companies are currently making use of mobile apps. |
| |  |  |  | | --- | --- | --- | | Pass | Merit | Distinction | | P1:  Explain how the purpose of a mobile app and the needs, preferences and characteristics of the user affect its design and the provided features. | M1:  Analyse how the implementation and design of mobile apps is affected by the intended user, current technologies and the purpose of the app. | D1  Evaluate how the effectiveness of mobile app implementation and design are affected by the intended user, current technologies and the purpose of the app. | | P2:  Explain the impact of current technologies on the design and implementation of mobile apps. | | |
| LA: A  Content | **A1: Types of mobile apps**  Native apps, Web apps, Hybrid apps  **A2: Context of mobile apps (features and purpose)**  Locale (e.g. maps)  Utility (e.g. file manager)  Productivity (e.g. office)  Immersive full screen (e.g. games)  Entertainment (e.g. music players)  Widgets (e.g. news ticker, quick device settings.)  **A3: Mobile device integration**  Using device functions (e.g. accelerometer, Global Positioning System)  User interface (e.g. small screen, touch screen.)  Operating system (e.g. Android™, iOS.)  Device permissions (e.g. read phone status, network access, read contacts.)  **A4: Mobile app programming**  Programming languages (e.g. Java®, Objective-C®)  Programming environments (e.g. Android Studio, Xcode®) |
| Task 1  (P1, P2) | **Task 1: Investigation of Mobile Apps**  **Explain** how the design and implementation of mobile apps are affected by the users and technologies available.  This task should be completed in the form of a written report  **The Report must be fit for purpose:**   * It must look professional and have a suitable theme/house style, format and content. * Suitable headings, subheadings, diagrams and images should be used and consistently formatted * Standard English must be used and the document should be free from spelling and grammar mistakes   **Explain** how the design and implementation of a minimum of two mobile apps are affected by users and available technologies:   * Choose two mobile apps. One must be available on multiple platforms e.g. Android, iOS, Web (Runs in a web browser) * For each app you must include the following:   + Images/print screens illustrating the key features of the app. You should refer to these in your explanations   + An explanation of the type of app (A1), its purpose, platform and intended users     - How has the intended users of the app influenced the design of the app?     - How has the purpose of the app influenced the design of the app?   + An explanation of the context of the app (A2)     - How has this influenced the design as of the app?   + An explanation of how the app integrates with the device (A3 – all that apply)     - How have these influenced the design of the app?   + An explanation of how the platform/platforms have influenced the implementation of the app (A4) |
| Task 2  (M1, D1) | **Task 2: Analyse and Evaluate a range of mobile apps.**  **Analyse** and **Evaluate** how the implementation and design of mobile apps are affected by the intended user, technology and purpose.  This task should be completed in the form of a written report.  **The Report must be fit for purpose:**   * It must look professional and have a suitable theme/house style, format and content. * Suitable headings, subheadings, diagrams and images should be used and consistently formatted * Standard English must be used and the document should be free from spelling and grammar mistakes   You must include a minimum of two examples of mobile apps that are available on multiple platforms. The mobile apps that you choose must be available on 2 platforms (e.g. Android, iOS) AND have a web app.  You need to **compare** and **analyse:**   * The different apps and the different implementations of the app on different platforms. * You should consider both the good and bad points of each app implementation and make justified suggestions for improvements.   Your **evaluation** needs to cover:   * The intended users of each app, and how the users’ needs preferences and characteristics have been met * The purpose of the app and how this is reflected in its design and the features the app has * The impact of current technologies available on various mobile platforms and how these have affected the way app has been designed and implemented |
| Evidence you must produce for this task | **Produce a report containing the evidence required for each of the tasks above.**  **Use the assignment document called “17.1 - Assignment – Investigate Mobile Apps and Mobile Devices” to produce your report**  **The assignment document already contains the assignment front sheet/feedback sheet so can submitted directly to TurnItIn** |

|  |  |  |
| --- | --- | --- |
| **To achieve the criteria you must show that you are able to:** | **Unit** | **Criterion reference** |
| Explain how the purpose of a mobile app and the needs, preferences and characteristics of the user affect its design and the provided features. | 17 | P1 |
| Explain the impact of current technologies on the design and implementation of mobile apps. | P2 |
| Analyse how the implementation and design of mobile apps is affected by the intended user, current technologies and the purpose of the app. | M1 |
| Evaluate how the effectiveness of mobile app implementation and design are affected by the intended user, current technologies and the purpose of the app. | D1 |