**Key Stage 3 Computer Science – unit medium term plan**

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| **Unit title:** | **App Development with AppShed** |
| **Key Resource:** | AppShed website: <https://appshed.com/> |
| **Assessed piece:** | Own build app:  Staged set of instructions to create an app. Two different levels of app challenge are provided to give higher and medium sets the chance of realistic assessment |
| **Teaching periods:** | Summer Term, 6 weeks. Note: some classes have 2 lessons per fortnight, some 3. |
| **AOs:** | AO2, AO3. |
| **Notes:** | This scheme of work is developed and stored online using the AppShed website. Learners will need to create accounts using their school email addresses, and will need to remember passwords between lessons.  At the end of the course, learners will publish their apps, and will pass a QR code to their teacher allowing their final app to be assessed. |

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| **Key Skills/SPAG Focus** |
| **Key skills:**   * **AO1** - Demonstrate knowledge and understanding of the key concepts and principles of computer science; * **AO2** - Apply knowledge and understanding of key concepts and principles of computer science; * **AO3** – Analyse problems in computational terms:   • to make reasoned judgements  • to design, program, evaluate and refine solutions.  **SPAG focus:**   * Accurate spelling throughout the app; * Correct technical language in project log; * Appropriate language and grammar within project log. |

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| **Resources** |
| * IT room for all lessons * Project-specific PowerPoints as referenced in the unit plan below * Access to AppShed website, free version * Access to learners’ Outlook Web App for lost passwords * Learners may store login details on their mobile phones to guard against loss * Learners may run apps on their own phones at end of lesson if desired |

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| **Overview of unit**  By the end of the unit pupils will be able to:   * **Create their own apps, using a selection of tools built into AppShed** and following guidelines to show understanding of the task and awareness of user needs. * **Review their work** to understand how their apps might be improved. * **Log their work in a progress log**, including clear explanations of what they have achieved.. * **Understand how to research with success**, using online sources appropriately and referencing accurately.   **Suggested activities and approaches** | |
| **Week 1** | **Key Skills:** AO2 and AO3.  **SPAG Focus:** accurate spelling throughout app and workbook.  **Lesson focus:** Sign up with AppShed, create a simple app with an image, some text fields and a button that makes a sound.  Write up in workbook.   * Use PowerPoint *AppShed Lesson 1* * Learners create their first app, which can be run on the workstation * App can also be published and used on a phone or tablet using a QR code * Note QR codes are automatically read by iPhone cameras * Write up skills are essential practice for the future |
| **Week 2** | **Key Skills:** AO2 and AO3.  **SPAG Focus:** accurate spelling throughout app and workbook.  **Lesson focus:** adding gallery images and map facilities to a new app.  Note: lost password emails from AppShed will likely end up in the user’s spam folder in their Outlook Webmail.   * Use PowerPoint *AppShed Lesson 2* * Expect a few forgotten passwords * Learners save 5 images to their AppShed folder – ensure images are big enough and have suitable names * Learners add a gallery tab, then add in images * Learners add a map tab – be sure to delete the London pin * Add pins as instructed on PowerPoint. Hint – use Tewkesbury Hospital UK to avoid hospital in USA * About me task is also provided * Write up as usual |
| **Week 3** | **Key Skills:** AO2 and AO3.  **SPAG Focus:** accurate spelling throughout app and workbook.  **Lesson focus:** Create a simple splash screen to replace the existing one. Then start using Blockly to do some programming behind the app.   * Use PowerPoint *AppShed Lesson 3* * Learners will use Fireworks to create a splash screen, then test it * Rest of lesson involves using Blockly, a block based programming language * Learners should work through the PowerPoint at their own pace. * Write up as usual |
| **Week 4** | **Key Skills:** AO2 and AO3.  **SPAG Focus:** accurate spelling throughout app and workbook.  **Lesson focus:** This lesson creates some pages that require user accounts – this stops just anyone seeing them.  Learners should by now be confident with AppShed, and this lesson expects them to discover features by themselves through individual experimentation.   * Create a few simple graphics * Discover how to use image links * Add some users to the app * Add a tab only accessible by registered users * Learners should work through the PowerPoint at their own pace. * Write up as usual |
| **Week 5** | **Key Skills:** AO2 and AO3.  **SPAG Focus:** accurate spelling throughout app and workbook.  **Lesson focus:** This lesson lets users create a contact page, and adds code to use the information input on the contact page. This is a self-paced lesson.  **Homework:** Log in to AppShed at home or at school, and write a description of a three-tab app you think you could create. Explain what each tab will contain, and give details of any graphics used.   * Use existing skills to start a new app * Add a contact page * Add extra code to manipulate user data * Learners should work through the PowerPoint at their own pace. * Write up as usual |
| **Week 6** | **Key Skills:** AO2 and AO3.  **SPAG Focus:** accurate spelling throughout app and workbook.  **Lesson focus: Assessment.**   * Learners follow check list from *High Level Assessment* or *Medium Level Assessment* to complete maximum number of tasks in the lesson * Time must be reserved for all learners to:   + Publish their website   + Send the QR code to their teacher by email |
| **Extra lessons 1 and 2**  **(Classes with extra lessons)** | **Key Skills:** AO2 and AO3.  **SPAG Focus:** accurate spelling throughout app and workbook.  Brief – Cheltenham Borough Council want an app to tell people about local attractions. Your task is to design an app that will do the following:   * Have an introduction tab to Cheltenham with a brief history of the town and a Borough Council logo * Have individual tabs for:   + The Town Hall   + The Pump Rooms   + Leisure@Cheltenham   + The Racecourse   + The Jonny-Rocks Stadium (Cheltenham Town Football Club) * The tabs for the different attractions should have:   + A photo   + What the facility is used for and what sort of events take place there   + The web address   + Contact details * A map tab is required showing the location of each attraction * A contact tab is also required   IMPORTANT: Use the Styled Text item to make your text more attractive.  Do not forget to publish your site and test it carefully. |