**7 PDA: Software Development**

**Level 8 - Student Evidence Checklist**

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| **Full name** | **Jamie Klein** | **Key:** A & D - Analysis and Design Unit  I & T - Implementation and Testing Unit  P - Project Unit |
| **Cohort** | **G3** |

The evidence required can be taken from your assignments, homework that you have completed on your own or by creating a specific example for the PDA.

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| **Week 2** | **Unit** | **Ref.** | **Evidence** | **Done** |
| I & T | I.T 5 | Demonstrate the use of an array in a program. Take screenshots of:   * An array in a program * A function that uses the array * The result of the function running     First function creates an array of 4 random die rolls, second function creates the highest number you can from those digits.      Running the two functions creates a random number from dice. |  |
| I & T | I.T 6 | Demonstrate the use of a hash in a program. Take screenshots of:   * A hash in a program * A function that uses the hash * The result of the function running     A hash of library books, a function to change the renter of one of the books by title, it being run and the result. |  |

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| **Week 3** | **Unit** | **Ref.** | **Evidence** | **Done** |
| I & T | I.T 3 | Demonstrate searching data in a program. Take screenshots of:   * Function that searches data * The result of the function running     Searches to find all the students that study a particular subject. |  |
| I & T | I.T 4 | Demonstrate sorting data in a program. Take screenshots of:   * Function that sorts data * The result of the function running |  |

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| **Week 5** | **Unit** | **Ref.** | **Evidence** | **Done** |
| A & D | A.D 1 | A Use Case Diagram |  |
| A & D | A.D 2 | A Class diagram. |  |
| A & D | A.D 3 | An Object diagram. |  |
| A & D | A.D 4 | An Activity Diagram |  |
| A & D | A.D 6 | Produce an Implementations Constraints plan detailing the following factors:   * Hardware and software platforms * Performance requirements * Persistent storage and transactions * Usability * Budgets * Time |  |
| P | P 5 | Create a user sitemap. |  |
| P | P 6 | Produce two wireframe designs. |  |
| P | P 10 | Take a screenshot of an example of pseudocode for a function. |  |
| P | P 13 | Show user input being processed according to design requirements. Take a screenshot of:   * The user inputting something into your program * The user input being saved or used in some way |  |
| P | P 14 | Show an interaction with data persistence. Take a screenshot of:   * Data being inputted into your program * Confirmation of the data being saved |  |
| P | P 15 | Show the correct output of results and feedback to user. Take a screenshot of:   * The user requesting information or an action to be performed * The user request being processed correctly and demonstrated in the program |  |
| I & T |  | Coding exercise 1: Static and Dynamic testing task A |  |

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| **Week 6** | **Unit** | **Ref.** | **Evidence** | **Done** |
| I & T | I.T 7 | Demonstrate the use of Polymorphism in a program.  Function that takes a Move as input which is an interface: |  |

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| **Week 9** | **Unit** | **Ref.** | **Evidence** | **Done** |
| A & D | A.D 5 | An Inheritance Diagram |  |
| I & T | I.T 1 | Take a screenshot of an example of encapsulation in a program.    Private methods within a fruit machine class. |  |
| I & T | I.T 2 | Take a screenshot of the use of Inheritance in a program. Take screenshots of:   * A Class      * A Class that inherits from the previous class      * An Object in the inherited class   the InstrumentTypes.STRING enum.   * A Method that uses the information inherited from another class.   The constructor. |  |
| P | P 11 | Take a screenshot of one of your projects where you have worked alone and attach the Github link.  A Workout tracker app for Android - https://github.com/JamieSK/ExerciseYourDemons |  |
| P | P 12 | Take screenshots or photos of your planning and the different stages of development to show changes.    Started with just this list view with workouts added through the code.    Then progressed to the screenshot above showing the add workout view,  then added a details view to see more info on the workout: |  |

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| **Week 11** | **Unit** | **Ref.** | **Evidence** | **Done** |
| P | P 18 | Demonstrate testing in your program. Take screenshots of:   * Example of test code      * The test code failing to pass      * Example of the test code once errors have been corrected      * The test code passing |  |

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| **Week 12** | **Unit** | **Ref.** | **Evidence** | **Done** |
| P | P 16 | Show an API being used within your program. Take a screenshot of:   * The code that uses or implements the API      * The API being used by the program whilst running |  |

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| **Week 14** | **Unit** | **Ref.** | **Evidence** | **Done** |
| P | P 1 | Take a screenshot of the contributor’s page on Github from your group project to show the team you worked with. |  |
| P | P 2 | Take a screenshot of the project brief from your group project. |  |
| P | P 3 | Provide a screenshot of the planning you completed during your group project, e.g. Trello MOSCOW board. |  |
| P | P 4 | Write an acceptance criteria and test plan. |  |
| P | P 7 | Produce two system interaction diagrams (sequence and/or collaboration diagrams). |  |
| P | P 8 | Produce two object diagrams. |  |
| P | P 9 | Select two algorithms you have written (NOT the group project). Take a screenshot of each and write a short statement on why you have chosen to use those algorithms.    This was used when getting transactions from an API, the category names had underscores in to separate words which didn’t Display that nicely, this loops through the categories and replaces the underscores with spaces.    This is used in the same class but to capitalise the category names, again for display. |  |
| P | P 17 | Produce a bug tracking report |  |
| I & T |  | Coding Exercise 2: Unit and Integration testing task B |  |