**7 PDA: Software Development**

**Level 8 - Student Evidence Checklist**

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| **Full name** | **Chad Ben Tung** | **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   The following is of the code in a test file, adding an instance of a fish to the array of fishes, and then returning the final count of fish. The array of fishes is attached to the river instance.    The following is the test passing. |  |
| 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   Here is a hash being made and a function.     * The result of the function running   Here is the hash on the terminal, and the previously defined function being called. |  |

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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 |  |
| 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  Represents what actions that people take on what. |  |
| A & D | A.D 2 | A Class diagram.  Name of each class  Attributes  Type of each attribute  Methods  Relationships |  |
| A & D | A.D 3 | An Object diagram.  Name of class  Instance of that class |  |
| 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. – Links on your site and what they access |  |
| P | P 6 | Produce two wireframe designs. |  |
| P | P 10 | Take a screenshot of an example of pseudocode for a function.  Here is an example of pseudocode for a function which checks the remaining budget and compares it to the initial budget, returning string to let the user know how much of their budget remains, and if necessary, warn them as they approach/exceed their budget. |  |
| P | P 13 | Show user input being processed according to design requirements. Take a screenshot of:   * The user inputting something into your program   Here, the user is inputting a new budget limit for their food and drink.     * The user input being saved or used in some way     Here is the altered limit: |  |
| P | P 14 | Show an interaction with data persistence. Take a screenshot of:   * Data being inputted into your program   Here is the user entering a transaction to be saved:     * Confirmation of the data being saved   Here is the following screen, confirming the update:    Here is the updated list of transactions: |  |
| 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   Here is the user inputting a new vendor they wish to add.     * The user request being processed correctly and demonstrated in the program   Here is the new vendor at the bottom of the list: |  |
| 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.  Here is an example of Polymorphism. The base class is this:    And the class that inherits from Kaiju is the following:    When the LandMonster instance calls roar, then rather than implementing the roar method of the parent class, this instance of Kaiju has its own roar method. |  |

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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. |  |
| 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 * A Method that uses the information inherited from another class. |  |
| P | P 11 | Take a screenshot of one of your projects where you have worked alone and attach the Github link.  https://github.com/chad-tung/Java-Project |  |
| P | P 12 | Take screenshots or photos of your planning and the different stages of development to show changes. |  |

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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   The error being shown is that the array index is out of bounds, due to tester error. (Index 11 is the last index)     * 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 code that uses the API is as follows:    Here is the populateData function:     * The API being used by the program whilst running   This is how the web app looks like when running, using the API data to populate tables and form bar charts: |  |

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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.  This is the group project: (https://github.com/chad-tung/Supernatural\_events\_tracker)    Here is the team I 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. |  |
| P | P 17 | Produce a bug tracking report |  |
| I & T |  | Coding Exercise 2: Unit and Integration testing task B |  |