**AP Computer Science Principles**

**Activity 1.2.6: MIT App Inventor “Create” Project**

Learning Targets: Develop, construct, and analyze a working model/prototype addressing the given problem.

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| **A** | **B** | **C** | **D** | **IE** |
| All game/story criteria have been met in an interesting way. | All game/story criteria have been met. | Most of the game/story criteria have been met. | Most of the game/story criteria have been met, with some errors.. | Not enough evidence of proficiency. |

* **MIT App Inventor Project Has Been Installed on Tablet # PROGTAB39**

**MIT App Inventor Project APK:**

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| *https://drive.google.com/open?id=0B57cYm-zUxZSU0dfS1h0a0hYazg* |

Learning Target: Generate and organize information in order to communicate observations, processes, and results.

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| **A** | **B** | **C** | **D** | **IE** |
| Create task questions have been fully answered and adhere to all AP submission standards. | Create task questions have been fully answered. | Create task questions have been answered, but lack some important details. | Create task questions have been answered, but lack some important details and do not adhere to the AP submission standards. | Not enough evidence of proficiency. |

**Practice Create Task Questions:**

1. Practice Opportunity for the Create Performance Task “Create a 50-59 second video in which you demonstrate the running of at least one significant feature of your program.” (Adapted from College Board Create Performance Task Part 1.)

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| [*https://youtu.be/\_WB0wXZrqgk*](https://youtu.be/_WB0wXZrqgk) |

2. “Identify the purpose of your program and explain what the video illustrates. (Approximately 150 words)” (Adapted from Create Performance Task Part 2a.)

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| The purpose of the program is to convert metric units using metric prefixes and the video illustrates just that. It shows you how you can select 2 different prefixes that are used on the input number and the output result. |

3. “Describe the incremental and iterative development process you used, focusing on two distinct points in that process. Describe the difficulties and/or opportunities you encountered and how they were resolved or incorporated." (Adapted from Create Performance Task Part 2b.)

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| For the most part I had a string of if and else statements so it would take the currently selected prefix and compare it to several other values using those statements. |

4. Your entire App Inventor program is an algorithm to repeatedly look for events and execute an event handler for each user or program event that occurs and has a handler. Your algorithm for the event loop combines the algorithms of each event handler that you created. “Describe how each algorithm within your algorithm functions independently, as well as in combination with others, to form a new algorithm that helps to achieve the intended purpose of the program. (Approximately 200 words)” (adapted from College Board *Create* Performance Task Part 2c.)

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| Everything within the app is mostly isolated within functions and event handlers. For example there’s an event handler that triggers code when the convert button is hit, when that happens the value of the currently selected prefixes are retrieved but that would be the only contact that method would make with any other method. |