## Rubric

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Knowledge, Comprehension & Application** |  |  |  |  |  |
| **CRITERIA** | **EXPECTATIONS** | **POSS** | **STUDENT** | **GIVEN** | **MULTI** | **TOTAL** |
| **Planning Document**  (group) | **You have submitted evidence** of completing the required learning material.  This evidence is presented appropriately (**Markdown**) unless negotiated for a different format.  Your planning document **identifies how you intend to solve the main problems** of the challenge.   * How will someone control your car? * How will your car respond to controls? * How do you integrate solutions?   Evidence for knowledge, comprehension, and application may include:   * **Knowledge**: Your evidence highlights that you recall and list relevant terms covered in your learning. It may tell a story to the reader (the teacher) or state your learning conditions. * **Comprehension**: Your evidence highlights that you can identify key aspects of your learning or explain what you've done to the teacher. * **Application**: It is clear from your evidence that you constructed a complete submission | 2  2  2 | \_\_/2  \_\_/2  \_\_/2 | \_\_/2  \_\_/2  \_\_/2 | Ax2  Tx1 | A\_\_/12  T\_\_/ 6 |
| **Prototype**  **(group)** | You have submitted evidence of your remote control car being constructed.  Your evidence consists of Arduino files and a video of your Arduino based car and controller in action (or as much action as we can manage 😊).  Evidence for knowledge, comprehension, and application may include:   * **Knowledge**: Your evidence highlights that you recall and list relevant terms covered in your learning. It may tell a story to the reader (the teacher) or state your learning conditions. * **Comprehension**: Your evidence highlights that you can identify key aspects of your learning or explain what you've done to the teacher. * **Application**: It is clear from your evidence that you constructed a complete submission | 2 | \_\_/2 | \_\_/2 | A x2  T x1 | A\_\_/ 4  T\_\_/ 2 |
| **Showcase**  (individual) | You have submitted evidence of your showcase. By default, your showcase responds to each of the three questions highlighted below. However, these questions can be negotiated or reframed with your teacher.   To achieve a passing grade (2) you must submit a serious attempt to respond to each question in each medium. By default, your submission for the showcase would be the given poster template, and both presentations   * Showcase poster * General Audience Presentation   The output can be negotiated with the teacher. Previous submissions have allowed for Google Sites, HTML, or Markdown documents.  Evidence for knowledge, comprehension, and application may include:   * **Knowledge**: Your evidence highlights that you recall and list relevant terms covered in your learning. It may tell a story to the reader (the teacher) or state your learning conditions. * **Comprehension**: Your evidence highlights that you can identify critical aspects of your learning or explain what you've done to the teacher. * **Application**: It is clear from your evidence that you constructed a complete submission | 2  2 | \_\_/2 \_\_/2 | \_\_/2 \_\_/2 | A x2  T x1 | A\_\_/ 8  T\_\_/ 4 |
|  | **Analysis, Synthesis & Evaluation** |  | | **SUB TOTAL** | | **A \_ / 24**  **T \_ / 12** |
| **Statement 1** | **Statement**: What was your project? How did it work? How did you design your interfaces, control systems, and system?  Learning to build stuff can be fun, but it was educational and why could it be essential that learners learn through play?  Statement responses are used to evaluate your ability to **analyse your learning**, identify **how and when you synthesised new understanding** on your own, and your ability to **reflect upon your work**  Showcases are a tool **you use to highlight your learning to different audiences**. Learning how to **reflect on what you learnt** during your assessments and **identifying** what parts of your work were **high quality** and what you could do **to improve** your work is an **essential aspect of education**.  This question will be marked against the following aspects of your ability to:   * To **summarise your understanding of technology** concepts and principles to a general audience * express **your understanding of technology** concepts and principles to a general audience * **your ability to communicate your learning** appropriately to experts   Evidence for higher-order learning may include:   * **Analysis**: Your evidence shows a reasoned understanding of what you did and why. For example, you may have explained how you did X, Y, and Z, but you continue to explain why you did them the way you did. * **Evaluative**: your evidence makes a judgement of something or between multiple things. This judgement may be the value of one thing over another or highlighting the significant differences between two things. * **Transferal**: your evidence highlights when you apply information, strategies, or skills that you have learnt to a new situation or context. | 4 | \_\_/4 | \_\_/4 | - | \_\_ / 4 |
| **Statement 2** | **Statement**: What are the challenges of incorporating/applying a diverse range of concepts, principles, and theories to solve a complex problem?  Learning to build stuff can be fun, but as our knowledge of programming and mechatronics grows, the number of abstractions we ned to incorporate becomes more complex. Tell us how you managed all of this, what went right, what didn't go so well, and how would you manage this in the future?  Statement responses are used to evaluate your ability to **analyse your learning**, identify **how and when you synthesised new understanding** on your own, and your ability to **reflect upon your work**  Showcases are a tool **you use to highlight your learning to different audiences**. Learning how to **reflect on what you learnt** during your assessments and **identifying** what parts of your work were **high quality** and what you could do **to improve** your work is an **essential aspect of education**.  This question will be marked against the following aspects of your ability to:   * To **summarise your understanding of technology** concepts and principles to a general audience * express **your understanding of technology** concepts and principles to a general audience * **your ability to communicate your learning** appropriately to experts   Evidence for higher-order learning may include:   * **Analysis**: Your evidence shows a reasoned understanding of what you did and why. For example, you may have explained how you did X, Y, and Z, but you continue to explain why you did them the way you did. * **Evaluative**: your evidence makes a judgement of something or between multiple things. This judgement may be the value of one thing over another or highlighting the significant differences between two things. * **Transferal**: your evidence highlights when you apply information, strategies, or skills that you have learnt to a new situation or context. | 4 | \_\_/4 | \_\_/4 | - | \_\_ / 4 |
| **Statement 3** | **Statement**: The previous assessment item asked students to become an expert on one feature of a remote control car. Review some of the tutorials students generated and identify what you could have used to enhance your tutorials. This enhancement could be good things you should include in the future or a 'here be dragons' moment.  Feel free to compare and contrast your work or others. What worked in them and what didn't work.  Statement responses are used to evaluate your ability to **analyse your learning**, identify **how and when you synthesised new understanding** on your own, and your ability to **reflect upon your work**  Showcases are a tool **you use to highlight your learning to different audiences**. Learning how to **reflect on what you learnt** during your assessments and **identifying** what parts of your work were **high quality** and what you could do **to improve** your work is an **essential aspect of education**.  This question will be marked against the following aspects of your ability to:   * To **summarise your understanding of technology** concepts and principles to a general audience * express **your understanding of technology** concepts and principles to a general audience * **your ability to communicate your learning** appropriately to experts   Evidence for higher-order learning may include:   * **Analysis**: Your evidence shows a reasoned understanding of what you did and why. For example, you may have explained how you did X, Y, and Z, but you continue to explain why you did them the way you did. * **Evaluative**: your evidence makes a judgement of something or between multiple things. This judgement may be the value of one thing over another or highlighting the significant differences between two things. * **Transferal**: your evidence highlights when you apply information, strategies, or skills that you have learnt to a new situation or context. | 4 | \_\_/4 | \_\_/4 | - | \_\_ / 4 |
| **Audio Presentation** | **You have submitted evidence of a presentation**. This presentation is **intended to be spoken** but can be negotiated. The presentation elevates the poster **by providing additional information via extrapolation** of the facts included in the poster.  **The presentation is not long**. No more than 5 minutes. You pitched your **presentation as if it could replace a physical showcase**. The production recording itself is not being assessed; instead, you will **be evaluated on your ability to extrapolate and expand your content** to expand the significant points to provide more details briefly.  Showcases are a tool **you use to highlight your learning to different audiences**. Learning how to **reflect on what you learnt** during your assessments and **identifying** what parts of your work were **high quality** and what you could do **to improve** your work is an **essential aspect of education**.  This question will be marked against the following aspects of your ability to:   * To **summarise your understanding of technology** concepts and principles to a general audience * express **your understanding of technology** concepts and principles to a general audience * **your ability to communicate your learning** appropriately to experts   Evidence for higher-order learning may include:   * **Analysis**: Your evidence shows a reasoned understanding of what you did and why. For example, you may have explained how you did X, Y, and Z, but you continue to explain why you did them the way you did. * **Evaluative**: your evidence makes a judgement of something or between multiple things. This judgement may be the value of one thing over another or highlighting the significant differences between two things.   **Transferal**: your evidence highlights when you apply information, strategies, or skills that you have learnt to a new situation or context. | 4 | \_\_/4 | \_\_/4 | A x1  T x2 | A \_\_ / 4  T \_\_ / 8 |
|  | **Submission Guidelines** |  | | **SUB TOTAL** | | **A \_\_/16**  **T \_\_/20** |
| **Readability** | **Assessment submission is ordered** and has a definite pattern to its construction. **The reader is not confused about the content in any given section and can easily follow the submission flow**. | 4 | \_\_/4 | \_\_/4 | X2 | \_\_ / 8 |
| **Formatting** | **Students have** **followed the formatting instructions,** including any provided templates and guides, or created their own legible formatting guide **and applied it constantly**. | 2 | \_\_/2 | \_\_/2 | - | \_\_ / 2 |
|  |  |  | | **SUB TOTAL** | | **\_\_ /10** |
|  | DAYS LATE \_\_\_/7 = \_\_\_% |  |  | **FINAL** | | **A \_\_/50 T \_\_/42** |