

## piRover Builds with K2

### Project 01 – piRover/Yahboom Evaluation Rev 1.0

#### Resources:

1. Completed Yahboom G1 Tank Robot build
2. Complete Project 01 Preparation activity

#### Task:

Complete Sprint 1 of this course by reflecting on your experience building and testing the Yahboom G1 Tank Robot (piRover). Document this experience by creating a technical report that provides evidence of your process, understanding, challenges, and lessons-learned.

Your report must address all requirements identified in this assignment document. Your writing must be clear and logical, free of all grammar, usage, mechanics, and spelling errors. Writing must be appropriate for a paper in a college-level course.

Address each of item listed on the following pages. You must provide specifics and details to earn full credit. Making general statements about the project or build will not earn full credit. Each of the required content items listed on page 2 will be evaluated using the following rubric.

4 points – Response is complete, identifying important aspects. Examines project experiences and results, providing specific and relevant examples from the project as evidence.

3 points – Response is sufficient, but some aspect or aspects are missing. Lacks depth. Additional details and examples on project experiences and results are required.

2 points – Response is provided but minimal support or project details are included. Lacks clarity and does not fully answer statements or questions provided to guide.

0-1 point – Response is incomplete, inappropriate, or is missing.

## piRover Builds with K2

### Requirements:

- 1) Title Page (first page of report. Do not show this heading or sub-headings. Content below is centered on page.)
  - a) Project Name: **Project 01 – piRover/Yahboom Evaluation**
  - b) Name:
  - c) Partner Name:
  - d) Date:
- 2) Project Definition (This heading is shown on page 2)
  - a) Provide an introduction to this report.
  - b) Why did you build the piRover? What need or requirement were you fulfilling by completing this course and the piRover build?
  - c) Briefly explain the value of a Yahboom G1 Tank robot as a solution. Provide just a broad overview here and save details for later in the report.
  - d) State the status of your project. Is your build complete and fully tested?
- 3) Contextual Knowledge (This heading is shown)
  - a) This report asks you to evaluate the piRover hardware, Yahboom software, and your experiences during the build of Sprint 1. Are you a qualified evaluator? Why or Why not?
    - i) What experience do you have as a tech user? For example, are you a gamer or possibly a drone pilot?
    - ii) Have you had formal technical training either at NMC or another school or university?
    - iii) During the partner review activity, you discuss your partner's knowledge and skills. How does your knowledge and experience with technology compare to her or his?
- 4) Hardware Evaluation (This heading is shown)
  - a) Discuss the build and installation of components and assemblies. Was the hardware build easy or hard?
  - b) What is your opinion of the build documentation? Consider both the Yahboom documentation as well as the resources provided by K2.

## piRover Builds with K2

- c) How would you rate the overall quality or performance of the hardware?
  - d) Do you have specific suggestions for improvement?
  - e) Discuss your partner's views on the piRover hardware and its quality.
- 5) Software Evaluation (This heading is shown)
- a) Discuss the Yahboom Robot mobile application and associated utilities that you used when testing your device. Was the software easy to install and use?
  - b) What is your opinion of the software documentation? Consider both the Yahboom documentation as well as the resources provided by K2.
  - c) How would you rate the overall quality or performance of the mobile software provided?
  - d) Do you have specific suggestions for improvement?
  - e) Discuss your partner's views on the Yahboom Robot software and its quality.
- 6) Conclusion – Overall Evaluation (This heading is shown. See Retrospective 01 – similar content)
- a) Consider your experience with this course and the piRover build so far.
  - b) Share at least one thing that you like about the course or build experience so far? What should be continued?
  - c) What is one thing that you would change? What can be improved?

Submit your completed P01 report to the Moodle site using the link provided. You must submit either a PDF or Word (.docx) document.