**APSC 200/293**

P2 Project – Progress Report Guidelines & Template – Fall 2018

Section:\_208\_\_\_ Team #: 4\_ TA:\_\_\_­­­­­­­­­Garrett Richardson\_\_\_\_\_\_ Date:\_\_Nov 21 2018\_\_\_\_  
  
Team member names:\_\_Liam Cregg, Mathew Jennings, Tristan Lawson \_\_\_\_\_\_\_\_

**1) Tasks/Issues Resolved or in Progress:**

* Determined adjacency matrix entries with adaptation to fit the specific application of the algorithm. This was done by taking the reciprocal of certain matrix entries based on the respective agents’ relative velocities.
* Began implementing these matrix entries and velocity comparisons in the MATLAB GUI code.
* Determined important restrictions on the parameters in the matrix entries based on considerations like max speed, acceleration, etc. These will be used to evaluate the functionality and implement limitations for the flocking program.
* Identified metrics with which to test the solution (e.g. whether the flock fragments, the distance separating the agents, whether the agents collide, etc.)
* Have fulfilled most of the sections in the project plan, but still need to work on implementation in MATLAB.

**2) Tasks/Issues that are New or Behind Schedule:**

* The implementation of the solution in MATLAB is taking longer than originally budgeted for. This is primarily due to a lack of familiarity with the source code of the app, and with MATLAB code in general.
* Need to begin testing the algorithm and making adjustments as needed based on outcomes.
  + Current trials result in the agents not flocking as intended. This will be fixed by adjusting the parameters and adding if statements to the code to ensure the agents remain in an orderly convoy.
* Some parameters still need to be defined in order to fully complete the matrix.
* No overall changes in project scope, however it seems unlikely that the team will be able to pursue some of the stretch goals, such as expanding the matrix for more agents and implementing active obstacle avoidance for each agent.

**3) Corrective Action and/or Adjustments to Scope or Schedule:**

* Although the MATLAB coding is moving slower than expected, there is also significantly less work required than originally foreseen. Fewer than 10 lines of code in order to modify it towards the application, then the program must be tested for functionality.
* The schedule will not have to be significantly altered. Most of the final week is scheduled for the final report. The code can be completed and tested before the midpoint of the week, leaving sufficient time to finish the report.
* Time to work on the final presentation will also have to be added, but similarly should easily fall within the budgeted time for the final report in the next week.

**APSC 200/293 | P2 Progress Report Rubric Section \_\_\_\_\_\_\_\_ Team \_\_\_\_\_\_\_**

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| Element | | Below Minimum Standards  BM-,BM,BM+ (< 50%) | Marginal  Ideas Level  ID-,ID,ID+ (50% - 66%) | Competent  Connections Level  CO-,CO,CO+ (67% - 84%) | Excellent->Exemplary  Extensions Level  EX-,EX,EX+ (85% - 100%) | *Weight (%)* |
| Spelling, Grammar, Punctuation | | Errors distract reader and restrict understanding; proof reading not evident. | Errors present do not significantly interfere with reader comprehension, but suggest a lack of proof reading/editing. | Language is generally accurate and errors are minor. | Language usage is exceptional with very few or no errors. | *10 %* |
| Document Clarity | | Unclear or confusing phrases, sentences. If provided, figures/tables/visuals are unclear or irrelevant. | Language is vague or awkward, sometimes requiring reader to infer the meaning. If provided, figures/tables/visuals are not completely clear or have limited connectivity to text. | Distinctly connected ideas convey the intended information, message and logic. If provided, figures/tables/visuals are clear and complement written information. | Intended messages and complexities are clearly conveyed. If provided, figures/tables/visuals enable reader to quickly grasp information and appreciate project status. | *30 %* |
| Concision | | Information is clouded by irrelevant information and/or verbosity. | Information can be understood, but the authority of the writing is diminished by repetition or unnecessary words. | The writing is generally concise and straight-forward, and not repetitious. | Precise language and relevant, succinctly sufficient explanations maintain reader focus. | *10 %* |
| Summary of Overall Project Status 1 | **Tasks/Issues Resolved or in Progress** | It is not clear which project tasks have been initiated or resolved. | Ongoing/resolved project activities have been identified with limited or no connections between tasks. | Ongoing/resolved project activities have been clearly identified with connections made between these tasks. | Ongoing/resolved project tasks have been clearly articulated. The reader has a clear understanding of how issues are related and how these tasks integrate with the larger project scope. | *50 %  (Balanced between all sections as appropriate based on project status.  Section size and content is expected to vary from team to team)* |
| **Tasks/Issues that are New or Behind Schedule** | It is not clear which tasks/issues are complete, new, and behind schedule. | New, pressing, and delayed issues have been outlined. | New and delayed issues have been outlined systematically. The reader has some understanding of how these issues are related. | All new project issues have been identified as well as an appreciation of their relationship. The reader also has a clear understanding of items behind schedule. |
| **Corrective Action and/or Adjustments to Scope or Schedule** | It is not clear what or how corrective actions will be taken to ensure timely project completion, or how the project has been adjusted to adapt to issues that arose. | Stated mitigation activities and/or adjustments to project criteria are listed but do not present a clear or believable picture for project direction. | Stated mitigation activities and/or adjustments to project criteria are clearly listed and appear valid based on the status of the project. | Professionally expressed mitigation activities and/or adjustments to project criteria provide the reader with a clear understanding of status and direction of the project, with all relevant questions answered. |

1 It is expected that each group will be at different stages of their project from week to week. Therefore, as the project unfolds, it is natural to discuss different features of your design process. Most importantly, teams should NOT artificially generate facts to ensure a fairly equal discussion of ***(i) Tasks/Issues Resolved or in Progress***, ***(ii)*** ***Tasks/Issues that are New or Behind Schedule***, and ***(iii)*** ***Corrective Actions***. Be honest with the status of your project; this grade item will be assessed considering your overall project status.

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| Element | Below Minimum Standards  BM-,BM,BM+ (< 50%) | Marginal  Ideas Level  ID-,ID,ID+ (50% - 66%) | Competent  Connections Level  CO-,CO,CO+ (67% - 84%) | Excellent->Exemplary  Extensions Level  EX-,EX,EX+ (85% - 100%) | *Weight (%)* |
| Progress Towards the Week 12 Deliverables | Little technical progress towards final deliverables, or progress is inconsistent with project requirements. | Modest progress and technical achievements are observed but leave concerns on the team’s likelihood of achieving the deliverables on spec and on time. | Progress and technical achievements meet the expected requirements towards achieving the deliverables. | Progress and technical achievements exceed expected requirements towards achieving the deliverables, leaving little or no doubt of a successful project outcome. | *100 %* |

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| Comments:  APSC 293  %  APSC 200  % |