Project Title (overall length: 1 page max)

<Team Member Names and Student #>

### 1. Motivation

A brief statement of the approach/environment to be implemented and justification of the relevance of the approach/environment to be included in the benchmark suite.

# 2. Methodology

A more detailed description of (1) the approach including the class of systems considered, the main mathematical framework used, etc; OR (2) the benchmark environment including a high-level description of the dynamics and the types of tasks that can be tested using the environment. For both control/environment implementation, please include relevant references.

# 3. Outline of Experiments and Comparisons

A plan for evaluating the implemented controller/environment. Guiding questions to consider:

* Controller implementation: Which ***two*** setups (environment and task) will the approach be tested on? Which ***two*** other approaches is the proposed approach compared against (e.g., LQR/iLQR, MPC, GP-MPC)? If applicable, what are the types of uncertainties to be tested on (e.g., noise, additive input disturbance)? What are the evaluation criteria or plots you are planning to show (e.g., performance, computation, data efficiency, safety)?
* Environment implementation: Which ***three*** existing control approaches in the benchmark will be used to demonstrate the features of the implemented environment? What are the evaluation criteria or plots you are planning to show (e.g., performance, computation)?

# 4. Expected Outcome

Given your current knowledge about the approach, what are the expected outcomes? For instance, discussions could be “we expect approach X to perform similarly well in nominal conditions as approach Y and better than Y in conditions with model uncertainties”/”we expect approach X to be data-efficient/computationally more efficient than approach X”.