

Key concept	Fails to meet criteria	Needs improvement	Acceptable	Good	Excellent	Points
PlusCal model single lock system <ol style="list-style-type: none"> 1. The control process correctly interacts with the other processes in PlusCal. 2. The control process is adequately modeled in PlusCal. 	The control process does not correctly interact with the other processes or is not adequately modeled.	-	The control process correctly interacts with the other processes and is mostly adequately modeled but contains some minor issues.	-	The control process correctly interacts with the other processes and is adequately modeled.	18
Requirements single lock system <ol style="list-style-type: none"> 1. Each property is correctly formalized and correctly classified as a safety/liveness property and (potential) need for fairness is justified. 	Only a few properties are correctly formalized and classified w.r.t. safety/liveness and fairness.	-	Most of the properties are correctly formalized and classified w.r.t. safety/liveness and fairness.	-	All properties are correctly formalized and classified w.r.t. safety/liveness and fairness.	28
<ol style="list-style-type: none"> 2. The model is deadlock-free. 3. Each property is successfully verified with TLA+. (Requires correct formalization of the property.) 	The model is not deadlock-free, or only a few of the properties are (correctly formalized and) successfully verified.	-	The model is deadlock-free. Most of the properties are (correctly formalized and) successfully verified.	-	The model is deadlock-free. All of the properties are (correctly formalized and) successfully verified.	

PlusCal model multiple locks system <ol style="list-style-type: none"> 1. The control process is adapted to multiple locks and multiple ships in PlusCal. 2. The control process is adequately modeled in PlusCal. 	The control process is not correctly adapted or is not adequately modeled.	-	The control process is correctly adapted and is mostly adequately modeled but contains some minor issues.	-	The control process is correctly adapted and is adequately modeled.	17
Requirements multiple locks system <ol style="list-style-type: none"> 1. Each property is correctly formalized for multiple locks and multiple ships. 	Only a few properties are correctly formalized.	-	Most of the properties are correctly formalized.	-	All properties are correctly formalized.	22
<ol style="list-style-type: none"> 2. The model is deadlock-free for the configurations with 2 ships and 3 respectively 4 locks. 3. Each property is successfully verified with TLA+. (Requires correct formalization of the property.) 	The model is not deadlock-free, or only a few of the properties are (correctly formalized and) successfully verified.	-	The model is deadlock-free. Most of the properties are (correctly formalized and) successfully verified.	-	The model is deadlock-free. All of the properties are (correctly formalized and) successfully verified.	
<ol style="list-style-type: none"> 4. A configuration leading to a deadlock/state with no progress is given and justified. 	No configuration leading to a deadlock/state with no progress is given.	-	A configuration leading to a deadlock/state with no progress is given but not adequately justified.	-	A configuration leading to a deadlock/state with no progress is given and adequately justified.	

Report quality The report: <ol style="list-style-type: none"> 1. forms a coherent whole that is well-structured. 2. is readable; language use and style are appropriate. 3. consistently describes the model of the system, the properties and the verification results. 4. adequately describes and motivates modelling decisions. 	All 4 aspects are missing or are not adequately dealt with.	Only 1 of the aspects is present and adequately dealt with. The other 3 aspects are missing or are not adequately dealt with.	Only 2 of the aspects are present and adequately dealt with. The other 2 aspects are missing or are not adequately dealt with.	Only 3 of the aspects are present and adequately dealt with. The remaining aspect is missing or is not adequately dealt with.	All 4 aspects are present and adequately dealt with.	15
Bonus <ol style="list-style-type: none"> 1. A schedule for the main controller is determined with an adequate approach. 	No schedule for the main controller is given.	-	A schedule for the main controller is given and the overall approach is described. Some parts of the approach are missing or not correct.	-	A schedule for the main controller is given and the overall approach is described in detail.	+10

- This rubric provides an overview of the high-level grading criteria and the corresponding point distribution. A more fine-grained grading schema will be used for the final grading.
- The grader gives feedback using annotations in the PDF. We do our best to motivate the grading for each of the aspects, and with the feedback and the grading schema, the grading should be clear.
- Comments serve both as motivation for the grading, but also to serve as feedback to you on what can be improved in the future.