CS2308: Summer 2023 Assignment 3 Rubric Student Name:

Style: 20 points

| Condition | Max Points | Points Awarded |
|---|-------------------|----------------|
| All lines less that 80 characters. | 4 | |
| Variables have meaningful names. | 4 | |
| Actions are fully commented. | 4 | |
| Every block indented one tab or 4 spaces. | 2 | |
| Code is not duplicated between branches (e.g. in an ifelse) | 2 | |
| File name is [Authors Last Name]_assignment3.cpp | 2 | |
| Author, collaborators, and date comments included. | 2 | |

Non-functional Requirements: 30 points

| Condition | Max Points Points |
|--|--------------------------|
| | Awarded |
| Robot has been defined as a class, not struct | 5 |
| Robot class has all listed member variables and <u>functions</u> . | 5 |
| All functions are fully commented. | 5 |
| Program stores array of Robot pointers. | 5 |
| Robot data members are private. | 5 |
| All dynamically allocated memory is deleted | 5 |

Test Cases: 50 points

Projects that do not compile will not be graded on these Test Cases.

Projects that terminate early will only be graded to the case where they cease running.

| Input | Console Output is at least | Max Points Points Awarded | |
|----------------|------------------------------|---------------------------|--|
| Start Program | Welcome. | 2 | |
| | How many robots? | | |
| 4 | Please name each robot. | | |
| Berry | (Exact text may vary) | | |
| Edan | Please select: | | |
| Edwards | M- move | | |
| Maclean | D- distances | | |
| | Q- quit | | |
| m Edan s | Edan is now stopped | 5 | |
| M Edan l | Program prints error message | | |
| | (Exact text may vary) | | |
| M Maclean r | Maclean's position is 1, 0 | 8 | |
| m Maclean s | Maclean is now stopped | | |
| m Maclean s | Maclean is now started | | |
| M Maclean r | Maclean's position is 2, 0 | | |
| M Edwards r | Edwards's position is 1, 0 | 8 | |
| m Edwards U | Edwards's position is 1, 1 | | |
| m Edwards l | Edwards's position is 0, 1 | | |
| M Edwards d | Edwards's position is 0, 0 | | |
| T | Program prints error message | 2 | |
| | (Exact text may vary) | | |
| r Berry Shauna | Berry's name is now Shauna | 5 | |
| m Berry | Program prints error message | | |
| | (Exact text may vary) | | |
| m Shauna l | Shauna's position is -1, 0 | 5 | |
| D | Edwards 4 | 10 | |
| | Maclean 2 | | |
| | Shauna 1 | | |
| | Edan 0 | | |
| Q | Goodbye | 5 | |
| | (Exact text may vary) | | |
| | (Program should terminate) | | |
| | | | |

| Total C | oints: | |
|----------|---------|--|
| i Otai r | Ullito. | |
| | | |