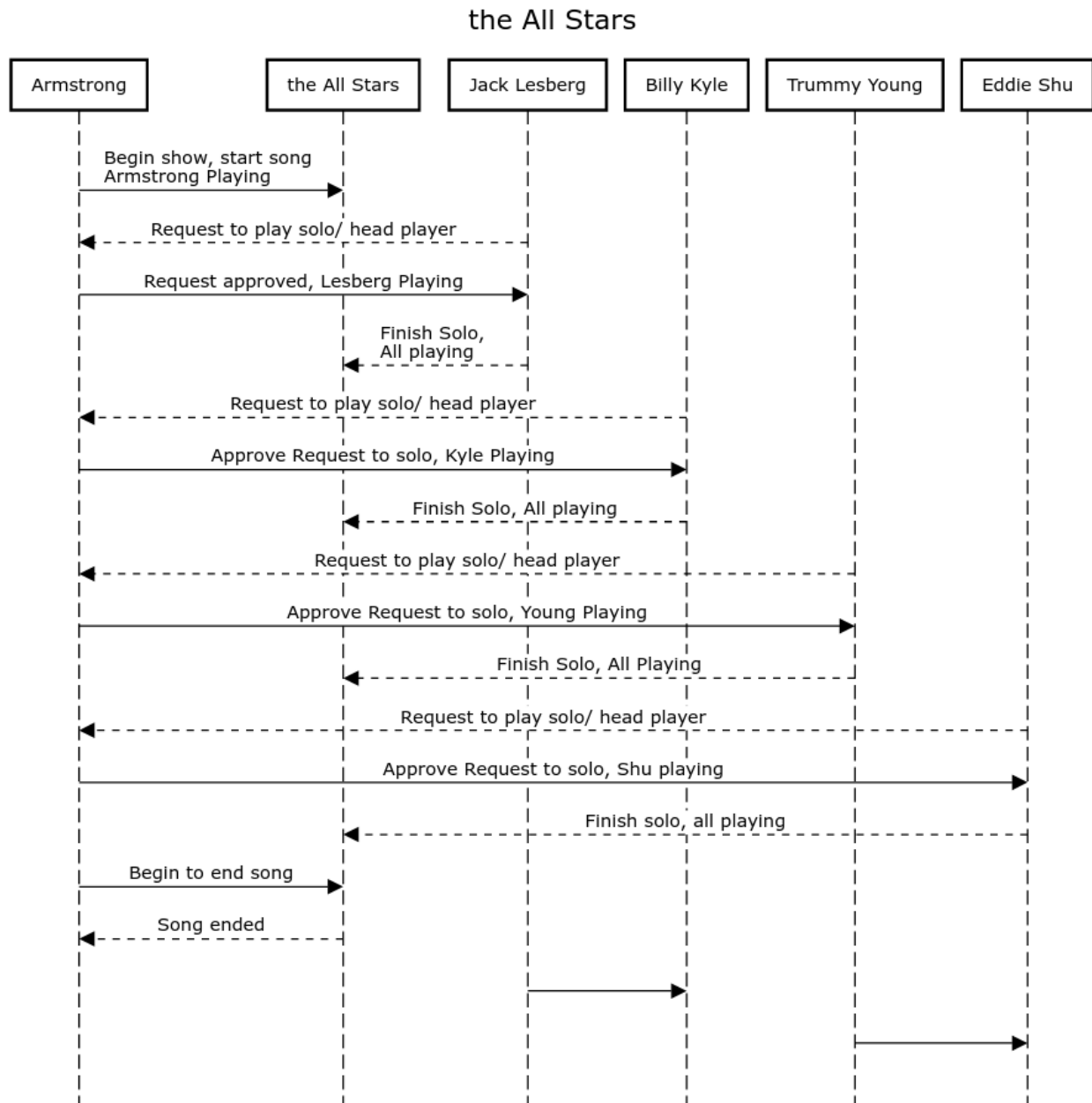


Liam Godin

CS 2303

Final Exam

Part 1

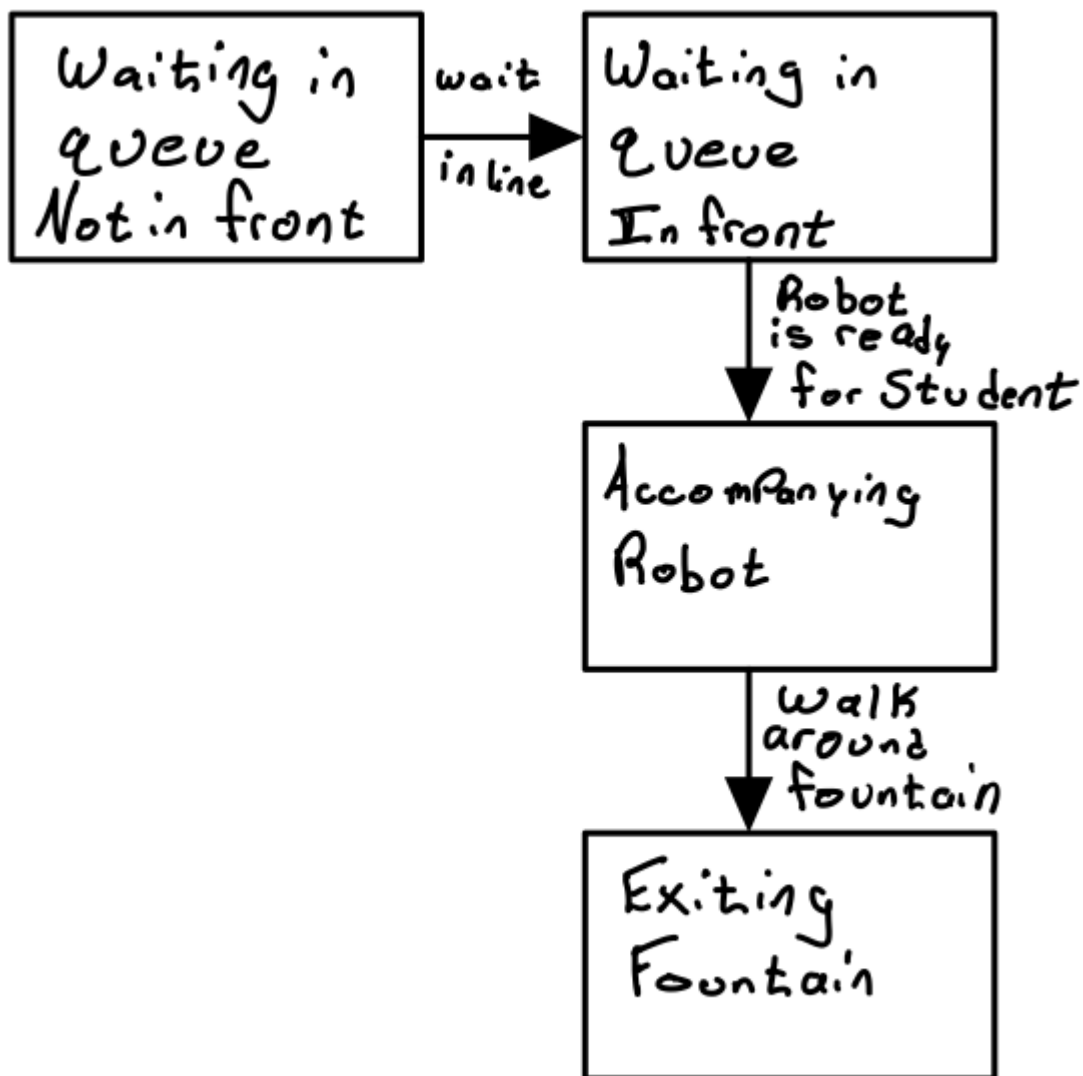


Part 2

Test Cases

- Case with list that contains element given
- Case with list that does not contain element given
- Case with list that contains multiple of element
- Case with empty list
- Case with list of different data type than element given
- Case with list that only contains element given
- Case with element at beginning of list
- Case with element at end of list
- Case with pointer given as element given

Part 3



```

typedef enum {
    waitingForBot,
    inLine,
    withRobot,
    exiting
} State;

State updateStudent(State currentState, Event event) {
    switch(event) {
        case robotAtEntrance():
            currentState = withRobot;
            break;
        case firstInLine():
            currentState = waitingForBot;
            break;
        case exitNext():
            currentState = exiting;
            break;
        default:
            break;
    }
}

```

A datatype of an Array filled with character pointers would be the best option for this application.

Students and Robots around the fountain

