Revised Bulletin Board Client-Server Protocol -- TCP/IP

5.1. POST

- Error/edge case 1: If the note is empty or has no colour/coordinate features (i.e without fields filled in), the posting request will be denied.
- Error/edge case 2: If the input x,y coordinates out of the range of the bulletin board, the note is not allowed to be posted.

5.2. GET

- It takes 3 parameters: String contains, String colour, String refers

- Contains: Search for a note at the (x,y) coordinates
- Colour: Search for a specific colour
- Refers: Search for a note that contains some keywords/messages
- Type 1: Get all pinned notes
- Type 2: Get desired notes with matching coordinates/refersTo/colour

5.3. PIN

- isPinned is a boolean value that indicates the pin/unpin status of a note and there is a variable (pinnedCount) that keeps track of the number of total pins on the board.
- When a note is pinned, increasePinCount() helper function will increment the pinnedCount and the status of isPinned will change to 'true'.
- Error/edge case 1: If one note is pinned at (x,y) coordinates, no other notes can be pinned at the same spot/ on top of the existing note. i.e a pin on top of a pin shouldn't be allowed.
- Error/edge case 2: If the user input negative coordinates, an error message will be displayed and the operation will not be accepted.
- Error/edge case 3: If the request was unsuccessful/couldn't be performed due to limitations of the bulletin board or note (e.g. trying to pin a note but not succeeding), Client/Server status code will be added to indicate the error.
- **6.3.** Server Error 5xx should be taken off since it is not implemented in the server design