p02 Second Deliverable

Getting Started

This deliverable will improve upon the previous deliverable so find your colorvisionproject on Replit. Review over any comments made by the professor and graders so that you can address any issues you had in the first deliverable.

Assignment

Your second deliverable should experiment with techniques for addressing color combinations that are safe for people with colorblindness.

To be innovative, we need to make incremental progress. Set a new subgoal for your deliverable.

Incrementally develop your program and then **update the README.md file to replace all text that begins and ends with !!! to document your particular program**.

This deliverable should STILL demonstrate use of "C++ Fundamentals" including:

- Variables
- Console Input and Output
- Decisions
- Iteration
- Functions

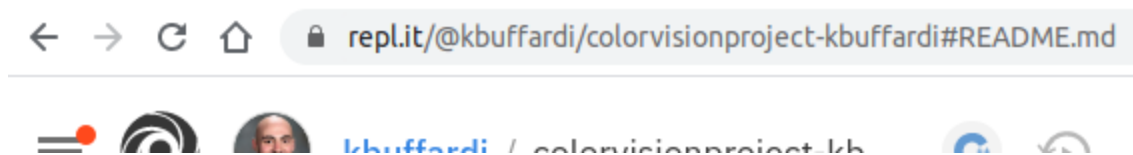In addition, it should demonstrate the following concepts:

- **Functions** - appropriate use of at least two functions. Each function should adopt proper prototype, definition, and call(s). You should also demonstrate appropriate use of **both** pass-by-value AND pass-by-reference parameters as well as at least two different return types. void can be considered one of the return types, if appropriate to your function. Main does not count as one of these functions.
- **File IO** - appropriate use of file input and/or output using fstream.
- Style - code should be easy to read, with curly braces that vertically-align with their statement, and all contents within curly braces should be indented, as demonstrated in the professor's code.

Submitting

Before submitting, don't forget to update your documentation in README.md!

1. Under the "Getting Started" section, below your previous deliverable's description, add "v2 Updates" describe what is new to your program (including if any bugs have been fixed) and how new functionality works
2. Under "C++ Guide," update the documentation of any of the p01 requirements if you have made changes/corrections
   1. Also add a new section for File IO, along with a description of how you have used it and why it is an appropriate use of File IO
   2. Under "Functions" describe your functions and why they demonstrate appropriate use of: (A) creating a unique function, (B) passing parameters as value AND reference, (C) different return types

Once you are satisfied with your work, press Submit (top-right on Replit) and then copy the URL of your Replit:

Then **paste the URL in the text submission** on Blackboard.

Press **Submit** and wait for a confirmation it has been submitted.

Grading
You will be graded on the following:

- **Useful Progress (20%)** - The program has clear use, no known faults, and the documentation is clear and makes the program easy to use
- **C++ Fundamentals (20%)** - Both the use and documentation show clear understanding and appropriate use of variables, console IO, decisions, iteration, and arrays/vectors
- **Functions (25%)** - Appropriate use of (and clear description of) at least two functions. Each function should adopt proper prototype, definition, and call(s). You should also demonstrate appropriate use of both pass-by-value AND pass-by-reference parameters as well as more than one return type.
- **File IO (25%)** - Appropriate use of (and clear description of) file input and/or output using fstream
- **Style (10%)** - Demonstration of best practices and style that makes the program easy to read, debug, and maintain

Points   100

Submitting	a website url
Allowed Attempts	1

Due	For	Available from	Until
Nov 17, 2023	Everyone else	-	-
Nov 20, 2023	8 students	-	-
Nov 24, 2023	1 student	-	-

p02

Criteria	Ratings				Pts
Usefulness The program has clear use, no known faults, and the documentation is clear and makes the program easy to use	**20 pts** **Proficient**	**15 pts** **Competent**	**10 pts** **Novice**	**0 pts** **Incomplete**	20 pts
C++ Fundamentals Both the use and documentation show clear understanding and appropriate use of variables, console IO, decisions, iteration, and arrays/vectors	**20 pts** **Proficient**	**15 pts** **Competent**	**10 pts** **Novice**	**0 pts** **Incomplete**	20 pts
Functions Appropriate use of (and clear description of) at least two functions. Each function should adopt proper prototype, definition, and call(s). You should also demonstrate appropriate use of both pass-by-value AND pass-by-reference parameters as well as more than one return type.	**25 pts** **Proficient**	**18.75 pts** **Competent**	**12.5 pts** **Novice**	**0 pts** **Incomplete**	25 pts
File IO Appropriate use of (and clear description of) file input and/or output using fstream	**25 pts** **Proficient**	**18.75 pts** **Competent**	**12.5 pts** **Novice**	**0 pts** **Incomplete**	25 pts
Style Demonstration of best practices and style that makes the program easy to read, debug, and maintain	**10 pts** **Proficient**	**7.5 pts** **Competent**	**5 pts** **Novice**	**0 pts** **Incomplete**	10 pts
				Total Points: 100	