# Report 5

This report includes updates and progress report for Task 2. I would continue Task 1 for 7500 next week.

## Scope

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| --- | --- | --- |
| **Tasks:** | **Task Goal/ Desired outcome** | **Progress** |
| Task 1 | **PCR data management**  Extracting the data in (.csv) from original PCR results file(.eds) | Quant-Studio 5: Completed |
| Quant-Studio 7: Completed |
| Next instrument: QS-7500 |
| Task 2 | **GS-Call data work-flow**  *Goal:*  This task aims to put the PCR result data into a proper format for further analysis in GS-Call software.  *Desired outcome:*  The application should open up in the web browser and take the user input info, then generate a specific formatted (.csv) file containing the information of samples/targets to be imported on the PCR machine by the user. | 1. Developing the code: 80% done 2. Interactive plate map was added 3. Choosing multiple kits/assays per plate (developing) 4. CFX import format completed working on the decision tree (QS / CFX) 5. Working on panel design |
| 1. Deploying the app |
| 1. Developing a data base in SQL and connecting that to the app |
| 1. Deploying the app with SQL database |
| :D more challenges to come |

## Task 2 (*GS-Call data flow)* progress:

We are working on GSL\_Experiment\_Setup web application to generate the layout information for PCR experiment.

***What the algorithm does:***

The algorithm works based on the data (panels: targets vs filters) for each “kit/product” and the given samples names list/number. Then, assuming a predefined layout of master mixes/ sample location through 384 well plate (according to Figure 2 & 3), generates the csv file including the info for all wells (a sample is attached to the email).

\*New feature:

As suggested by Angela,

1. an interactive plate-map is added to the body of the app. In this way, R&D scientist have the option to assign different kits/assays to different sub-blocks of 384 well plate.
2. Decision tree was added for both CFX/QS machines

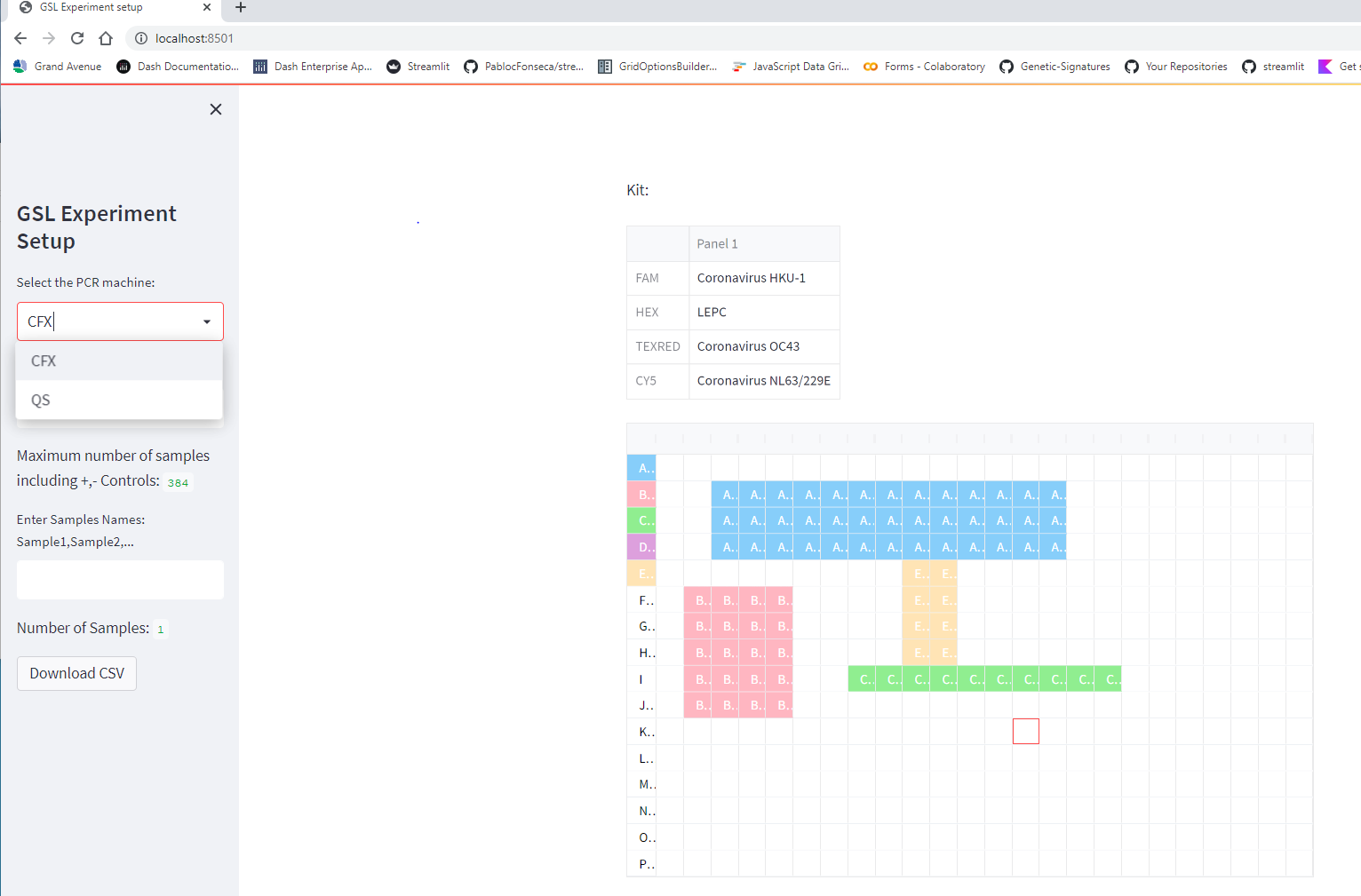
I am currently working to develop this feature

An screen shot of the web app is shown in Figure 1. There are 3 very simple steps for the users to follow:

1. The user follows the left sidebar and first selects the kit/product that they want to use and the panels of the kit will be shown for them in the right-hand side.
2. Next, the user copies or writes the name of the samples for the kit (the max sample number
3. The user will assign different kits in blocks within the same plate map.

***Challenges to be addressed:***

1. Both CFX and QS machines to be considered 🡪 addressed decision tree has been considered
2. R&D may want to test several kits per plate 🡪 interactive platemap/colors has been added for up to 5 kits/assays per plate
3. There are 2 more working layout for master mixes/samples 🡪 will be addressed in the second place



1

2

Figure 1: GSL-Experiment\_setup with interactive platemap feature colors has been assigned for considering up to 5 kits (A, B, C, D, E) per plate (box 2), decision tree for CFX/QS machines has been added (box 1)