

Deliverable	Milestone Due Date	Michail	Juan	Alec	Grant	Robbie	Devlyn
<b>Initial Planning Phase</b>	March 10						
Research client side frameworks	March 8	I	I	R	R	A/I	I
Research server side frameworks	March 8	I	I	R	R	I	R
Create Repo and establish CI tools	March 10	A	A	R	C	C	C
Create UML blueprints for proposed System	March 10	R	R	C	I	R	A/C
<b>Project Setup Phase</b>	March 11						
Create client side framework*	March 11	A	I	C	R	C	I
Create server side framework*	March 11	I	I	C	R	A/I	I
Brainstorm Filters*, **	March 11	R/A	R	R	R	R	R
Create storyboards** on paper	March 11	C	R	A	I	R	R
<b>Implementation Phase</b>	March 18						
Implement Filters**	March 19	R/A	R	R	C	A	R
Implement UI according to storyboards	March 18	I	C	I	A	C	R/A
<b>Testing Phase</b>	March 22						
Test implemented UI	March 21	R	R	I	R	C	R/A
Test implemented Filters**	March 22	R	R	A	R	R	C
<b>Writing Report Phase</b>	April 5						
Report on success of implementation	March 27	C	A/C	R	C	R	R
Description of tools used	March 28	R/A	R	I	A	C	I
Explanation of decisions made	April 1	C	C	R	C	A/I	R
Recommendation for future work	April 3	R	R	I	A	C	I
* = Has description							
** = Has definition of term							

Descriptions		Definitions
<p><b>Client side framework</b> Using React (via `create-react-app`), and optionally a starter kit such as Reactstrap, setup a basic client architecture.</p> <p>Anticipated components so far:</p> <ol style="list-style-type: none"> <li>1. Ace Editor: A web text editor that offers syntax highlighting for Python and other languages.</li> <li>2. Support for drag and drop file upload for users to provide their source code into the application. Support zip files that will be unzipped automatically. This will use JSZip as a module, since Grant has prior experience with it.</li> <li>3. A placeholder area for text about warnings or recommendations - this does not need real data for the first iteration since the server framework will provide it.</li> <li>4. Ability to re-zip the source code for download should the user have made any modifications in response to the warnings and recommendations. This also uses JSZip</li> </ol>		<p><b>Filter</b> A filter is a function which checks a file, set of files, or directory for a condition to be true. This could be as simple as seeing if any files in the project are empty and reporting back. More complicated examples are:</p> <ol style="list-style-type: none"> <li>1. Compiling the Python codebase and seeing if any modules are unused</li> <li>2. Seeing if different files are expecting different versions of Python</li> <li>3. Analyzing the codebase for any security vulnerabilities currently and released by the Python community</li> </ol>
<p><b>Server side framework</b> Using Node.js and Express, create a server that provides REST endpoints for:</p> <ol style="list-style-type: none"> <li>1. Deploying the client side code (see <b>Client side framework</b> task) to a requesting browser</li> <li>2. Passing files into a server workspace where filters will be run</li> <li>3. Running a file through a filter, multiple filters, or all filters and then reporting any errors or recommendations to the client</li> <li>4. When the user closes the session, all uploaded files are cleared. This happens automatically during session expiration (due to client inactivity) as well</li> </ol>		<p><b>Storyboard</b> A storyboard is a layout of the user interface for the application. It is a rough idea of how the flow of the application will be.</p>
<p><b>Create Repo/establish CI tools</b> Using Gitlab and its builtin CI tools, optionally using external third party CI tools if the need arises</p>		
<p><b>Brainstorm Filters</b> The proposed project runs code through a series of filter to reduce the amount of bad coding practices and minimize the negative effects of software evolution. A list of issues, design items, and other tools needs to be brainstormed that would be turned into filters</p>		

Rules:		
	Someone who is responsible for a task, should be informed about the task that it is dependant on	
	Somoene who is responsible for a task, shouldnt be the only one accountable for the task completion	
	Everyone should have at least two R tasks, and two C tasks	
	Each task should have someone who is R, A, C and I unless...	
	Every Task has at least two R	
	Order of priority: R, A, C, I	
Legend	Description	
R	<b>Responsible</b> for completing task	The task is going to be completed by the person who is responsible for it
A	<b>Accountable</b> for the completion of the task	This person should make sure that the task is completed.
C	<b>Consult</b> on what needs to be done for the task	Two way communication; This individual would have the knowledge about the task but might be working on some other task
I	Those that need to be <b>Informed</b> by the task progress	One way communication; This person should know about the progress on the task
OM	One machine	
CC	Compute Canda	