Functional

~~(What's the API's format etc.)~~
~~TODO: where to save the report file, how to return the file via API etc.~~
See PR https://github.com/WING-NUS/SSID/pull/372

Technical
Considerations from meetings:
- Current PDF report generation is included in "View Printable" feature, whereby the user can use the browser's "Save as PDF" feature to save a printable page as PDF report if they wish. This solution was proposed instead of generating PDF report directly because the current code-viewing mechanism involves client-side JavaScript and server-side Rails as in Add viewing printable static page for submission pair by sibinhho99 · Pull Request #206 · WING-NUS/SSID · GitHub .
- If we want to generate PDF report for the API, it is unwieldy to try to generate the PDF report from this static page by launching a browser instance server-side to run the JavaScript required for code display and print out the PDF resport. Thus, generating a simplified version of the report purely using Rails is proposed.
- Compared to existing PDF, the hardest component to implement using raw HTML is syntax highlighting. This requires external dependencies. However, since it is not critical to have syntax highlighting for the PDF report, we would rather keep it simple and not have syntax highlighting.
- Thus, the optimal solution for now is to generate minimalist htmls and PDF reports from Rails for the API.

HTML to PDF conversion can be done using
pdfkit/pdfkit: A Ruby gem to transform HTML + CSS into PDFs using the command-line utility wkhtmltopdf (github.com)