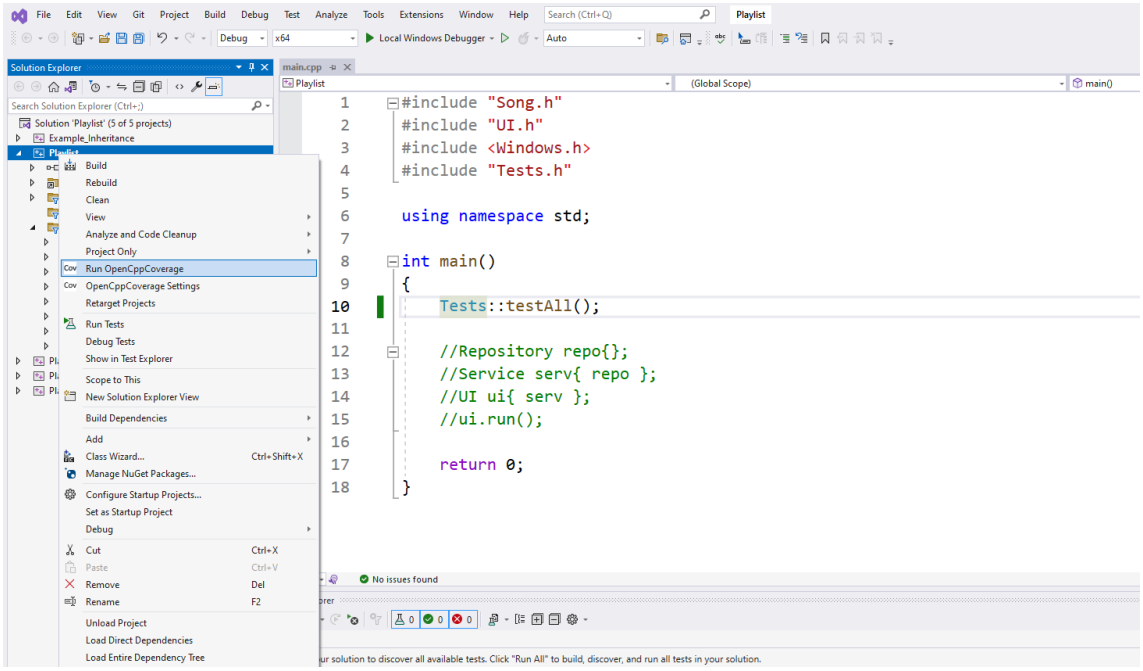
SETTING UP OPENCPPCOVERAGE WITH VISUAL STUDIO 2022

OpenCppCoverage is a tool for verifying unit testing coverage, but it can also be used to count the executed lines in a program for debugging purposes.

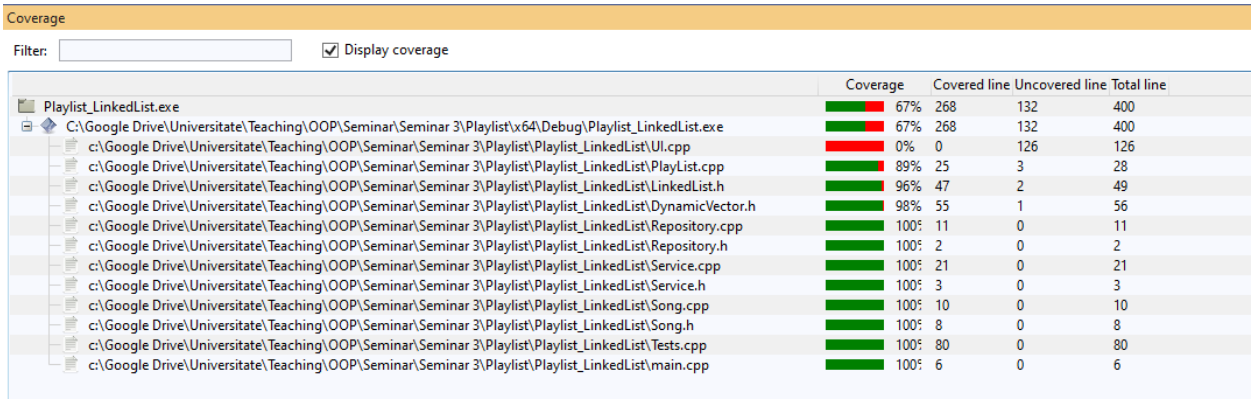
1. If VS2022 is running, close it.
2. Unzip the archive **VSPackage.zip**.
3. Execute **VSPackage.vsix.** It will install the tool for VS2022.
4. Restart Visual Studio. After the installation is complete and Visual Studio has restarted, open the project you want to check coverage for and make sure that only the tests are run in your main function:

```
int main()
{
	Tests::testAll();

	//Repository repo{};
	//Service serv{ repo };
	//UI ui{ serv };
	//ui.run();

	return 0;
}
```

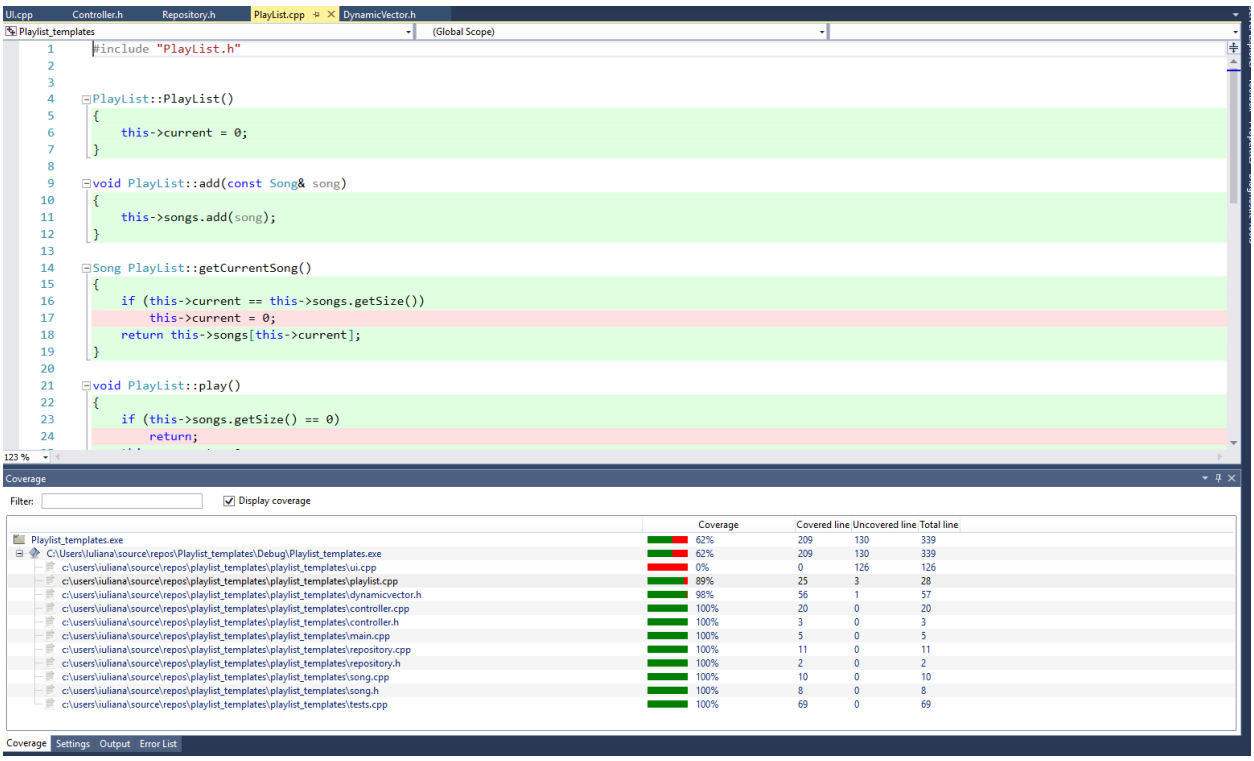
5. Right click on the project and you should find the “Run OpenCppCoverage” menu item:



6. The current project will be built and the Coverage window will be opened. This will show the coverage for the entire project. Expand the ".exe" item to see coverage for each individual file.



7. When clicking a file, it will open and the lines covered/not covered by tests will be shown in green/red:



Make sure you have at least 98% coverage for all your modules, except the UI. We need at least 98% coverage in our (rather simple) applications, as less than 98% would mean that a certain line

of code has never been run (e.g. a one-line function, a special case in a function). In real applications, code coverage less than 98% is accepted.

More details about OpenCppCoverage can be found here:
https://github.com/OpenCppCoverage/OpenCppCoverage