WebApi is used to fetch the data from the backend and format is as per the need.

In future the web api can be enhanced to implement pagination to ensure a lightweight data for end clients, like mobile devices.

Also, dependency injection is used for the purpose of formatting the data on an hourly basis. Later the implementation cab be invoked via a different implementation of the IDataReporting interface.

A Library is created to be able to talk to the web api end point and to generate the excel sheet for the returned data from the web api. Later, in case there is need to save the data in another format or if there is need to use any other excel sheet third party library, then the decoupled architecture will ensure extensibility of the application.

Mvc solution is created to enable capture of information from the user, to do a specific pagination or to choose which way to save the data. Currently an only implementation to save data is available, i.e. excel sheet generation.

The application is kept decoupled to ensure cleaner action plan while attempting to extend the application in future. The decoupled nature of the solution also eases the unit testing implementation using mock infrastructure.