Flash Score Test Project

The scope of this Test Project is to help assess various skills required in the development of software inside LBP Software company. This test does not represent a real scenario that we use inside but the various components used are very similar, that’s why it is important in this evaluation scenario. A diagram of a software project

Description automatically generated

The goal of the project is to download data from the Flash Score ( <https://www.flashscore.com/> ) web site and save it in an InMemory Database. This is done using a Console application (**LBP.Tests.StartUp**) which is called with needs to be called a specific argument “-download”. The application that uses the custom library (**LBP.Tests.FlashScore**) to download the Match Information. Once the matches are downloaded, it will use a gRPC Client Library (**LBP.Tests.GrpcClient**) to send the information to the database. The actual saving into the database it is being done by a gRPC Service (**LBP.Tests.GrpcService**) which has the actual connection to the database, via an Entity Framework project (**LBP.Tests.Data**).

To test that the data was saved correctly, the console application needs to be called with different arguments “-view”, which again will connect via the gRPC Client to the gRPC Server and retrieve this information from the database.

To resume what needs to be implemented:

* In LBP.Tests.StartUp
  + Complete the implementation of **FlashScoreWorker** to achieve the goals of the project.
  + Add Missing Dependency Injection Services
  + Call the **FlashScoreWorker** based on the required arguments.
* In LBP.Tests.FlashScore
  + Implement a simple Bot (**FlashScoreBot**) that downloads information from the main page of the FlashScore Web site. No need to expand matches that are not expanded, only the fully visible ones.

* In LBP.Tests.GrpcClient
  + Implement the **GrpcClientConnector** which will Connect to the gRPC Server and the necessary calls.
* In LBP.Tests.GrpcService
  + Add the necessary methods for Saving and Retrieving data from the database.
* In LBP.Tests.Data
  + Finish the Match Class with all the missing fields available in the FlashScore web page that could be used as relevant information for a Soccer Match.

There will be points for every complete or partial implementation of every required implementation. The application does not necessarily needs to be running at the end of the available time for this implementation, but if it is complete, bonus points will be awarded.