# High Level Architecture

Business Layer Tests

Demo Service

Data Access Layer

Business Layer

Client Service

Status Worker Service

* 1. Status Worker Service – This is a worker service project which runs periodically and update the network connectivity status of configured hosts
  2. Client Service – This exposes services to add user, add service provider, subscribe user to a service provider health, etc. Any front end application should be able to consume these services and build the UI of the network monitor app
  3. Demo Service – This just have a demo service to work with network monitor app. This has no connection to any other layer in the app. This just returns hard coded values. Built in health check, health check UI and health check network nuget packages installed and configured to demonstrate OOTB solution.
  4. Business Layer – Provides functionalities used by presentation layer.
  5. Business Layer Tests – Unit tests methods to cover functionalities in business layer. Not all tests are written. Couple of tests being written to demonstrate the usage.
  6. Data Access Layer – Connects with the database. Implemented the repository pattern with unit of work. Using in memory databases for the scope of this implementation.

# Not Addressed

1. Input validations
2. Method and attribute comments
3. UI client (only services implemented)
4. Complete test coverage (only 2 test cases implemented to demo the usage)
5. Null checks and data related fail safes
6. Worker service is not configured as a windows service
7. Minimum logging is used. ILogger object is passed but not configured with a log provider such as Serilog. Logs will only display in console
8. Read values from config file. Some values are hard coded
9. Authentication and authorization - Login, token

Above features are not implemented due to time constraint