**Assumptions**:

1. News paper publication name has been randomly names as “ABC” news
2. Dummy News and Advertisement service project has been created to mimic the news source. This can be replaced with any xml/json based SOAP/Restful service to be consumed by application
3. Constants are added in classes to use while developing, which can be configured in configuration files or in app.config and refer from there.

**Application details:**

1. **Application is having following project libraries:**
   1. BusinessLogicLayer: All functionality for getting news/advertisement source and creating news paper pages with news and advertisement has been added into this project
   2. Entities: This project has only classes and enumeration required for the application
   3. Client: This project is behaving a client which only consume business logic layer to get news paper output. This can be anything like any other class library/a .Net project or any other client framework which can consume .Net dll
   4. SourceService: This is dummy application to mimic the news and advertisement sources
   5. UnitTest: This is Unit test project with .Net framework which do some unit test based on test data present in it
2. **Application code level details:**
   1. Application has been made keeping in mind of SOLID principle, keeping only one responsibility for a class, implementing abstract classes and interfaces to extend the functionality in future if needed
   2. Separate folder has been created with different namespaces to make code readable and maintainable
   3. Tried to keep code simple and with less business logic in a single file. Also, implemented Singleton pattern which fits best to the scenario and avoided unnecessary implementation of multiple design pattern code architecture pattern
   4. Few changes have been made using constants so that within less news and advertisement functionality can be showcased. Maximum new per page is kept 3, Maximum ad per page is kept 2 and maximum content per page is kept 5
   5. Few methods are added which are not implemented to showcase the scalability of the application. These can be found in Interface or Abstract class which are used.