**Chapter 6: User manual**

**6.1 Deployment guidelines**

**6.1.1 Environment for development**

* Operating system: Window 10 Pro
* Code IDE: Visual Studio 2017
* Code Editor: Visual Studio Code
* Node.js: 10.15.3
* Docker: 18.09.2
* Plugins:
  + TSLint

**6.1.1.1 Setup development environment**

*6.1.1.1.1 Install Visual Studio 2017*

*6.1.1.1.2 Install Visual Studio Code*

*6.1.1.1.3 Install Node.js*

*6.1.1.1.4 Install Docker*

**6.1.1.2 Local network setup**

**6.1.2 Environment for deployment**

Platform: Kubernetes Engine on Google Cloud Platform

**6.1.2.1 Install Google Cloud SDK**

**6.1.2.2 Configure for Google Cloud SDK**

**6.1.2.3 Setup Kubernetes Engine on Google Cloud**

**6.1.2.4 Build and push docker images**

**6.1.2.5 Create Kubernetes deployments**

**6.1.2.6 Setup Google pub/sub**

**6.1.2.7 Setup SendGrid**

**6.2 User guidelines**

**6.2.1 User sign up**

**6.2.2 User sign in**

**6.2.3 User sign out**

**6.2.4 User update profile**

**6.2.5 User searches posts**

**6.2.6 User searches other users**

**6.2.7 User creates posts**

**6.2.8 User chats with other users**

**6.2.9 User joins a group**

**6.2.10 User follows other users and views followings/followers**

**6.2.11 User bookmarks posts and view bookmarked posts**