

Chapter number	Software required (With version)	Free/Proprietary	If proprietary, can code testing be performed using a trial version	If proprietary, then cost of the software	Download links to the software	Hardware specifications	OS required
1	Visual Studio Community 2017 - Version 7.5.4 (Build 3) Xcode 9.4.1	Free	N/A	N/A	https://visualstudio.microsoft.com/thank-you-downloading-visual-studio-mac/?sku=communitymacrel=15 https://itunes.apple.com/au/app/xcode/id497799835?mt=12	<ul style="list-style-type: none"> • macOS Sierra 10.12 • 1.8 GHz or faster processor. • 4 GB - 8GB of RAM. • Approximately, 1GB of hard disk space 	Mac
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Detailed installation steps (software-wise)

The steps should be listed in a way that it prepares the system environment to be able to test the codes of the book.

1. Software A: **Xcode Development IDE**

1. First, launch the **App Store** Mac Application
2. Next, search for **Xcode** within the **Search** bar and click on the **Get** button and then click on the **Install** button
3. Once the installation is complete, go to your **Application** folder and double-click on the **Xcode** application
4. Finally, install any required components if the installation asks you to.

2. Software B: **Visual Studio Community 2017 (Mac)**

1. Ensure that you have installed the **Xcode** first prior to installing Visual

Studio Community 2017.

2. Launch your browser and enter in <https://visualstudio.com> to download **Community 2017 for Mac** which is located within the **Download for Mac** button.
3. Once the installer has downloaded you will need to run it by double-clicking on the **VisualStudioForMacInstaller_39689927.1534490671.dmg** file and double-click on the **Install Visual Studio for Mac** button, located within the **Visual Studio for Mac Installer** dialog.
4. You will see the Verifying "Install Visual Studio for Mac" message and then you will be prompted with an "Install Visual Studio for Mac" is an application downloaded from the internet. Are you sure you want to open it?
5. Next, you will be presented with the **Visual Studio for Mac - Installation** window, click on the Continue button to proceed to the next step.
6. Then, ensure that the checkboxes for **Android**, **iOS**, and **macOS**, as well as **.NET Core** have been selected under the **Platforms** group and ensure that the checkbox for **Xamarin Workbooks and Inspector** has been selected under the **Tools** group.
7. Next, click on the **Install and Update** button to proceed to the next step within the wizard and begin installing the **Visual Studio for Mac IDE** along with the **Xamarin Platform SDK and Tools**. If you have any missing components, the **Visual Studio for Mac Installer** will proceed to download and install the necessary installers for the platform dependencies. This process can take some time and is dependant on the speed of your computer and internet connection.
8. Finally, once the installation has completed you will be presented with the **Installation Finished** section of the wizard. Click on the **Launch Visual Studio** button to launch **Visual Studio Community 2017 for Mac**.