Software specifications

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	Virtual Box 5.x or higher	Free			https://www.virtualbox.org/	Common Unix Printing System	Any
2	Ubuntu Server 16.04 LTS or higher	Free			https://www.ubuntu.com/	Common Unix Printing System	
3	Ubuntu Server 17.04 or higher	Free			https://www.ubuntu.com/	Common Unix Printing System	
4	PHP 7.1.x or higher	Free			http://php.net/	Common Unix Printing System	Any / Ideally use Ubuntu through Virtual Box
5	Apache 2.4.x or higher	Free			https://httpd.apache.org/	Common Unix Printing System	Any / Ideally use Ubuntu through Virtual Box
6	Nginx 1.12.x or higher	Free			https://nginx.org/	Common Unix Printing System	Any / Ideally use Ubuntu through Virtual Box
7	AWS user	Free			https://aws.amazon.com/	Common Unix Printing	Any

						System	
	account					System	
8	Iron.io user account	Free			https://www.iron.io/	Common Unix Printing System	Any
9	Docker 1.12.x or higher	Free			https://www.docker.com/	Common Unix Printing System	Any / Ideally use Ubuntu through Virtual Box
10	MySQL 5.7.x or higher	Free			https://www.mysql.com/	Common Unix Printing System	Any / Ideally use Ubuntu through Virtual Box
11	Mongo 3.4.x or higher	Free			https://www.mongodb.com/	Common Unix Printing System	Any / Ideally use Ubuntu through Virtual Box
12	Redis 3.2.x or higher	Free			https://redis.io/	Common Unix Printing System	Any / Ideally use Ubuntu through Virtual Box
13	Apache JMeter 3.2.x or higher	Free			http://jmeter.apache.org/	Common Unix Printing System	Any / Ideally use Ubuntu through Virtual Box
14	Zend Server 9.1.x or higher	Proprietary	Yes		http://www.zend.com/	Common Unix Printing System	Any / Ideally use Ubuntu through Virtual Box

Detailed installation steps (software-wise)

1. Virtual Box, install following the official installation instructions here https://www.virtualbox.org/manual/ch01.html#intro-installing
2. Ubuntu Server 16.04 LTS or higher, install following the official installation instructions here https://www.ubuntu.com/download/desktop/install-ubuntu-desktop
3. The rest of the software can be easily installed following each chapter's guidelines.