

## 4. development environment

### 1.Environment

Dimension	Environment	Description
development language	Python3	In this project, the Client wanted us to use Python and MATLAB because they had experience with python. we used Python 3 as our development language because the team members had experience with Python, and Python was easy to learn and use for developers and clients.
IDE:	PyCharm	PyCharm is a powerful Python editor that is cross-platform
Related Library	<a href="#">pydicom</a>	<i>pydicom</i> is a pure Python package for working with <a href="#">DICOM</a> files. It lets you read, modify and write DICOM data in an easy "pythonic" way.
	<a href="#">csv</a>	the csv module in python implements classes to read and write tabular data in CSV format. It allows programmers to say, "write this data in the format preferred by Excel," or "read data from this file which was generated by Excel," without knowing the precise details of the CSV format used by Excel.
Testing	Unit Testing	our teammate will test functions using sample file from client.

### 2. Tools

these are some tools for our communication and update information.

Tool	Function	Link
Teams	We can use Teams to communicate with client and teammate, and Client can upload some useful materials and file for us	<a href="https://teams.microsoft.com/_?culture=zh-cn&amp;country=CN&amp;lm=deeplink&amp;lmsrc=homePageWeb&amp;cmpid=WebSignIn#/my/file-recent">https://teams.microsoft.com/_?culture=zh-cn&amp;country=CN&amp;lm=deeplink&amp;lmsrc=homePageWeb&amp;cmpid=WebSignIn#/my/file-recent</a>
Confluence	Confluence is the main tool that we describe our project overview, Meeting notes and Deliverables.	<a href="https://confluence.cis.unimelb.edu.au:8443/collector/pages.action?key=COMP900822020SM2ATWombat">https://confluence.cis.unimelb.edu.au:8443/collector/pages.action?key=COMP900822020SM2ATWombat</a>
Trello	Trello is used to create our product backlog and schedule our time. these tasks (including to do, doing, and done) will be recorded in Trello	<a href="https://trello.com/b/g2z1GQmo/comp90082-at-wombat">https://trello.com/b/g2z1GQmo/comp90082-at-wombat</a>
Slack	We use Slack to get in touch with teammate and that is the place we make simple discussion, as well as contact with our supervisor and another team members.	<a href="https://app.slack.com/client/T0199DC2TNU/C0184RMAKMM">https://app.slack.com/client/T0199DC2TNU/C0184RMAKMM</a>
Github	Codes will be uploaded to Github, so each of us can contribute to it and work on the own part in personal branch.	<a href="https://github.com/lllrq/COMP90082-AT">https://github.com/lllrq/COMP90082-AT</a>

### 3. Useful materials

these are some materials about DICOM, pydicom, csv and so on. everyone can add some materials if you think it is helpful.

Material	Link
Introduction of DICOM by Wikipedia	<a href="https://en.wikipedia.org/wiki/DICOM">https://en.wikipedia.org/wiki/DICOM</a>
github for pydicom	<a href="https://github.com/pydicom/pydicom">https://github.com/pydicom/pydicom</a>
pydicom User Guide	<a href="https://pydicom.github.io/pydicom/dev/old/pydicom_user_guide.html">https://pydicom.github.io/pydicom/dev/old/pydicom_user_guide.html</a>
python deal with csv file	<a href="https://docs.python.org/3/library/csv.html">https://docs.python.org/3/library/csv.html</a>

### 4. System Diagram

