

Risk Assessment

Risk	Possible Consequences	Probability	Severity	Overall Risk	Preventative Measures
Twitter disables public access to their API and data	The dashboard would be unable to function without the Twitter API as its data source.	Low	High	Medium	A few hours of data will be recorded in the format that Twitter provides so that if they decide to disable access then the dashboard can still function from stored data.
Twitter changes their API methods	A substantial amount of connection code may have to be rewritten to use the new methods.	Low	Medium	Medium	The application will be written using a library that has been written to handle connection to Twitter (Tweepy python library), if twitter updates their API methods then Tweepy should be updated quickly as there are many programs using this library.
Twitter changes their API response format	A substantial amount of code may have to be rewritten to accommodate the changes.	Low	Medium	Medium	The application will be created as multiple modular sections using APIs to connect them together so that if one part is required to be rewritten the changes will be contained to a single section of the code

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					base rather than having to rewrite code in all / the majority of files.
Tweeepy stops updating their repository and the library stops functioning correctly.	Either a different python Twitter library would have to be implemented or the Twitter connection would have to be managed manually.	Low	Low	Low	As the library is already downloaded (and is stored in this GitHub repository) unless Twitter also changed their API the current files would still be usable. A backup of this repository will be kept (by both me and GitHub) to ensure that any files do not get lost.
ChartJS stops updating their repository and the library stops functioning correctly.	Either a different JavaScript graphing library would have to be implemented or the visualizations would have to be created manually.	Low	Medium	Medium	As the library is already downloaded (and is stored in this GitHub repository) the current files would still be usable. A backup of this repository will be kept (by both me and GitHub) to ensure that any files do not get lost.
JQuery stops updating their	The application would have to be	Very Low	Medium	Low	The library is extremely popular so this is highly unlikely. As the library is already

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repository and the library stops functioning correctly.	implemented using vanilla JavaScript.				downloaded (and is stored in this GitHub repository) the current files may still be usable. A backup of this repository will be kept (by both me and GitHub) to ensure that any files do not get lost.
My development machine breaks and all data is unrecoverable.	All data would be lost, and I may be unable to work on the project until I was able to purchase a new computer.	Low	High	Medium	All files for this project are stored on GitHub and/or Dropbox (excluding the database created by the application). The only work that would be lost is work that has not been committed, which are normally at most one hour intervals. I would be able to get hold of a new computer to work on within a maximum of 72 hours, so at most three days would be lost. Though it is likely that some progress could be made without the use of a computer (designing a soon to be implemented part of the project).
Internet connection is	Unable to access live data from Twitter as	Medium	Low	Low	This would have no long term effects on the project, short term it would not be possible

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unavailable for a few hours.	well as retrieve any new libraries required.				to work on certain areas of the project, though there would almost certainly be progress that could be made without internet access.
Internet access is unavailable for a number of days or weeks.	Without internet access for longer periods of time the rate of development would decrease, and the project specification may have to reevaluated.	Extremely Low	High	Low	There are multiple locations available to me where it would be possible for me to stay, in the highly unlikely event that internet access was unavailable on a university campus. If internet becomes unavailable at all of these locations for a long period of time there will be bigger issues than the completion of this project.
System requirements are not adequately identified	Application does not meet the expected requirements due to the interpretation of the requirements.	Low	Medium	Low	Requirements will be defined specifically so that little or no interpretation is required.

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Project involves the use of technology that hasn't been used in a prior project	Extra time will be spent trying to figure out how to use these new technologies.	Medium	Medium	Medium	Popular libraries and technologies will be chosen so that it is likely that there will lots of available resources to provide assistance if required, which will minimise the amount of time that is wasted wasted.
Inadequate estimation of time to complete tasks.	The list of requirements would not be fully implemented to the level that was initially planned.	Medium	Low	Low	When estimating the time to complete tasks, if unsure the expected time will be overestimated slightly rather than underestimated so that if anything, additional time is available to improve the application.
Source code is lost	A substantial amount of progress that had been made on the project is lost and needs to be completed again.	Low	High	Medium	files for this project are stored on Github and/or Dropbox (excluding the database created by the application). The only work that would be lost is work that has not been committed, which are normally at most one hour intervals.

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Some of the source code is accidentally overwritten	A substantial amount of progress that had been made on the project is lost and needs to be completed again.	Low	High	Medium	files for this project are stored on Github and/or Dropbox (excluding the database created by the application). The only work that would be lost is work that has not been committed, which are normally at most one hour intervals.
Some of the source code is corrupted	A substantial amount of progress that had been made on the project is lost and needs to be completed again.	Low	High	Medium	files for this project are stored on Github and/or Dropbox (excluding the database created by the application). The only work that would be lost is work that has not been committed, which are normally at most one hour intervals.
There is poor visibility of project progress	Important tasks within the project could be missed out due to the lack of visibility.	Very Low	High	Medium	A project management system will be used to keep track of both the project as a whole as well as individual parts of the project. This will ensure that there is high visibility of the project's status as long as this system is kept up to date.

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The project developer becomes seriously ill or injured.	The project would almost certainly not create the expected application in the same timeframe, either the project specification would have to be reevaluated or the deadline would have to be extended.	Low	Very High	Medium	I will do my best not to become ill.