Risk Management Documentation

This risk management document is to outline which areas of my FYP could potentially cause issues and with this I will be able to minimise or mitigate the risk(s) from arising. I will break down the risks into groups from ‘lowest impact to project’ to ‘highest impact to project’ with the use of a colour code system to easily identify these risks.

# **Risks**

1. Scope-Creep:
   1. Adding unnecessary aspects to the project.
2. Delays / Time Management:
   1. Working alone
3. Unfamiliar with developing in ASP.NET & Server-side coding
   1. Challenging myself
   2. Loss of time learning and researching
4. Project Management
   1. Not logging all information as and when it arises.
5. Performance
   1. System robustness
   2. Productive working time (Coding and Report writing)
6. Lack of professional knowledge
   1. Teaching aspects and feedback
   2. Loss of time learning and researching
7. Not enough functionality
   1. Product is too simplistic
8. Motivation / Self-control
   1. Solo project, need to keep things under control and moderate own work to ensure productivity and project progression

## Lowest Impact

* **Scope-Creep**: This is a risk that is present in all projects. The risk can be easily mitigated by sticking to the requirements list set out at the start of the project and by using a communication channel to converse the possible future changes that need to be made or if additions need to granted to the application. As this is a solo project and the client is that of students mainly, the changes that are made to the project are analysed by the core developer (myself) and new additions are only considered once all prior elements have been implemented.
* **Project Management**: This risk is present for the entirety of the project as there are many aspects and documents that add up to create the project as a whole. This risk can be minimised by keeping accurate and concise logs of what happens throughout the project and ensuring that these changes are logged in multiple places as to keep a back-up record of the version control and of the features that are added or removed from the application.
* **Motivation / Self-control:** This is a personal risk that I have brought to the project due to the project being an individual assignment. The risk can be easily mitigated by ensuring I stick to my project management and sprint plans. I will also be setting myself goals throughout the project as a sense of self-achievement to help promote myself into doing work.

## Medium Impact

* **Delays**: This is an impact which can be mitigated through proper time management, following sprint plans and keeping a log of changes that are made to the project as they are committed.
* **Not enough functionality:** This is a risk of the project not fulfilling all that was stated within the requirements list as well as not adhering to the full specification of the project. I have added this risk to the middle category due to the risk being not hard to manage but that the end result could potentially not being exactly as I have planned it due to other reasons such as “Lack of time management”, “Poor delivery and execution” or even “Not enough knowledge in the area”. This risk can be mitigated by sticking to the plan that is given and ensuring that the project management is kept up-to-date and if an issue arises, log it and come back to it if it is taking too long to complete (over-working a single problem).
* **Unfamiliar with ASP development:**  This is a risk which will arise due to its nature. The risk isn’t in the project by in myself and so mitigating this difficult, but minimisation is quite easy. The use of research and going through past work using the framework as this will help aid in remembering how to use the framework but can also be minimised further due to the knowledge I already have obtained through the use of HTML and JavaScript in multiple other modules during my education.

## Highest Impact

* **Lack of professional knowledge**: This impact can cause a higher amount of issues due to the time needed to be taken to research and then execute that which has been researched. This can only be minimised as this risk can only be overcome over time due to the need to learn and remember how certain aspects of teaching are carried out and how this information can then be conveyed to the client / user in a practical and effective manner.
* **Performance:** This is a risk which is more targeted at the result of the project and the application’s outcome. The performance of the application can be determined by how effective the code writing is for the application which in turn will affect how well the scripts are carried out. This also ties in with the data being stored on the database as this can also lead to security issues due to the database needing to be robust enough to perform as intended but also secure enough to not leak data. This risk can be minimised by writing effective code and by ensuring all measures are taken to sustain data integrity.