**Assignment Topic:**

As a software development professional, you will run into all kind of projects and situations within those projects. This assignment is designed to present you with a fictitious situation and ask you to recommend an approach to software development for that situation.

Here is the situation:

Georgia school of Arts has been the choice for higher education in the state. The college has been serving the state for last 50 years. College has mostly operated using manual processes and state has been expecting the college to match the other colleges in the country in terms of automation. College leadership also sees great benefit by automation as it hopes to keep tuition in check and provide better service to student and faculty.

The college wants to automate most of its processes in next 5 years. College do not have budget to shorten the timeframe and wants to do this automation mostly in-house with hired consultants when needed.

The IT department has lot to learn in terms technology to build this system. Also, college leadership has some idea on what to build but not sure what exactly are college needs in terms of automation. College has formed a group from various departments of college that will help define and drive the development. This group will work closely with IT department on this effort.

College wants to reap the benefit of automation as it is being built and use feedback from system users to guide future automation efforts.

The automation will start with processes that impact the students for e.g. admissions, class registration, grading, learning management system etc. Some of the key things identified for this software are the privacy and security concerns. College wants to make sure that systems can't be hacked and only the right people have access to the info.

To start with, the team working on this project consists of 5 developers, 3 QA and a Team Lead. Organization had signed a contract with a local company to provided additional resources when needed.

What software development methodology would you suggest for this situation and why?

* Step 1: Start with analyzing the scenario and**identifying characteristics** of this situation and **specify logic** behind the selection of characteristics. Example: You may identify "User Needs Unknown" as a characteristic based on statement x, y and z in the scenario.
* Step 2: Map the characteristics to **selection of model** and **provide your logic**to make that conclusion. For e.g. you may say that since scenario has x and y characteristic, model A and B would be potential candidate. Additionally, since scenario has characteristic z, model A would be best option.