

Tucker Moncey

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## **Integration and Configuration Model**

An integration and configuration model incorporates previously existing program into a new system. Much of the code incorporates components that fit the structure of the new system. The components can be altered to better fit the system if necessary. The benefits of an Integration and Configuration Model are that the coder does not need to write code for the reused components, and the components are already fully tested.

Code relating to a login system, user interface, or polymorphism could potentially be used for the university scheduling system. Tkinter is a Python library that can be used for the user interface for choosing the type of user and selecting different options. The user would have to log into the system, so a sample code of a login module could be used. The code could be altered to include the ID number and user type as well. To make sure the user inputs valid responses, the library PyInputPlus could be used. The system needs to display lists/tables like class lists and schedules, so the library PrettyTable could be used to easily display tables. The system would have to store the information of many different users, so a database could be used.

A Login Module in Python:

<https://www.javatpoint.com/login-module-in-python>

Login Interface using Tkinter:

<https://www.geeksforgeeks.org/create-a-modern-login-ui-using-customtkinter-module-in-python/>

PyInputPlus Description:

<https://pypi.org/project/PyInputPlus/>

PrettyTable Description:

<https://pypi.org/project/prettytable/>