# Design pattern:

**Abstract Factory**

# Explanation:

We decided to use an abstract factory, because it is designed around creating different things (such as in a factory line), via different factories.

The entire system is designed around the creation and modification of a case (through the case manager), log, interview or notification. From the initialisation of the system till the end, every class relates to the class **CaseManager**, which handles the creation, modification and viewing of any and all cases, **Interview**, which represents a scheduled interview between two users, **Log**, representing the logged information, or **Notifier**, which notifies any party as necessary. The main factory is the **UserPortal**, which represents the abstract generalised factory, from which all other portals inherit. From the aforementioned UserPortal, five portal inherit, which are the **ModuleStaffPortal**, **SCOPortal**, **DMTPortal**, **AMTPortal**, and **StudentPortal**, all of which *manufacture* one of the previously mentioned *products*.