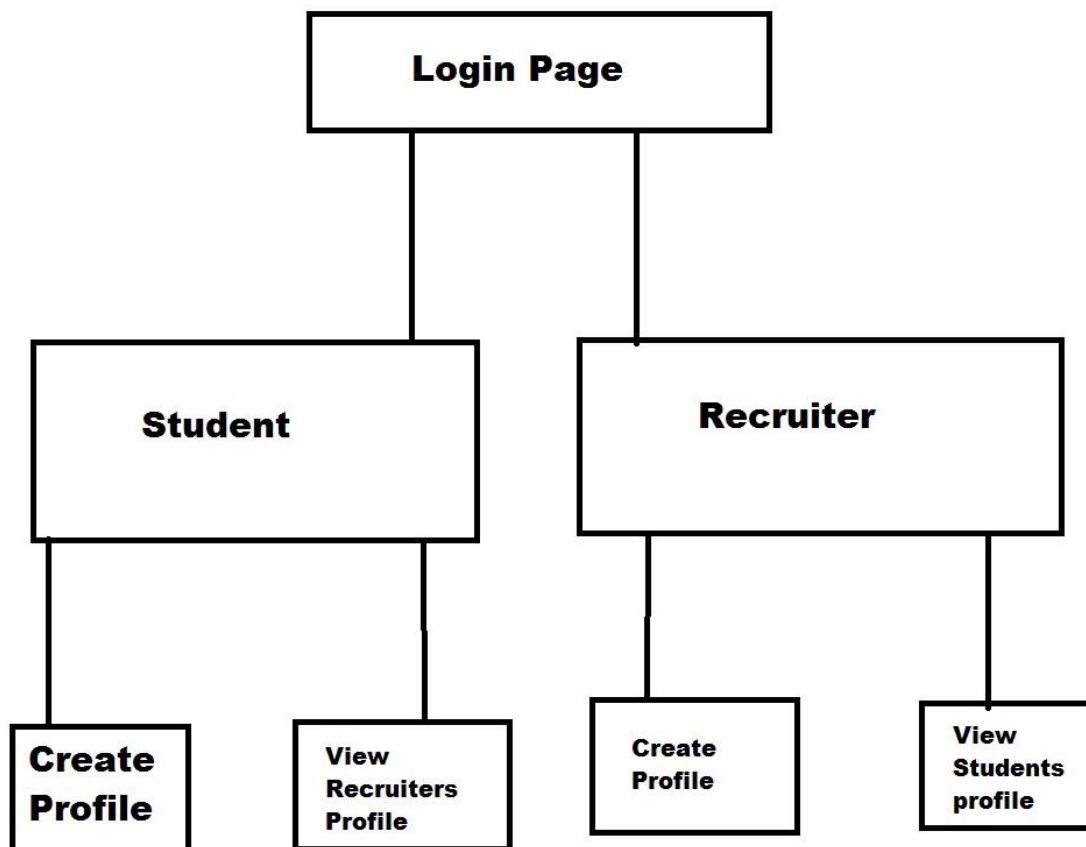# DESIGN PATTERN

Pattern used is the factory method in which a class relates to subclass decides which class to instantiate.

Factory Method makes a design more customizable and only a little more complicated.

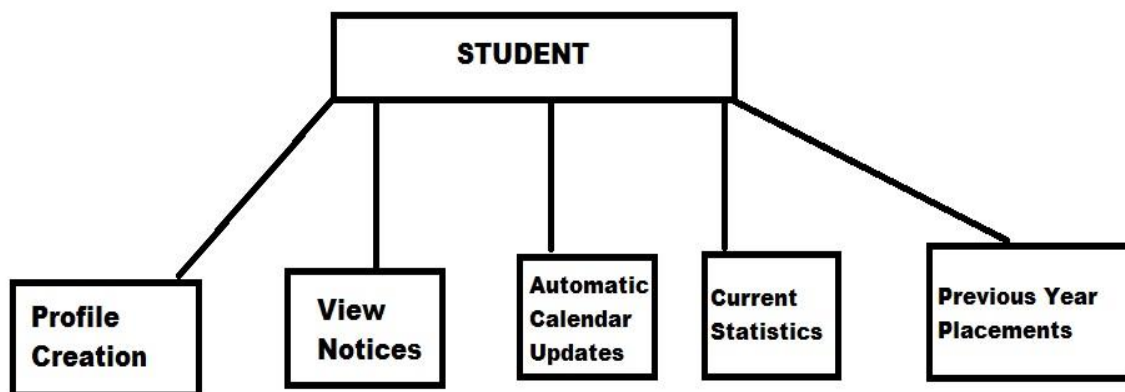The Factory Method defines an interface for creating objects, but lets subclasses decide which classes to instantiate.

In our project the login portal will decide to which we need to login like student login or company login.

```
                    ┌──────────────────┐
                    │   Login Page     │
                    └──────────────────┘
             ┌─────────────┴─────────────┐
   ┌──────────────────┐        ┌──────────────────┐
   │     Student      │        │    Recruiter     │
   └──────────────────┘        └──────────────────┘
     ┌──────┴──────┐             ┌──────┴──────┐
┌─────────┐  ┌──────────┐   ┌─────────┐  ┌──────────┐
│ Create  │  │ View     │   │ Create  │  │ View     │
│ Profile │  │ Recruiters│  │ Profile │  │ Students │
│         │  │ Profile  │   │         │  │ profile  │
└─────────┘  └──────────┘   └─────────┘  └──────────┘
```

If chosen student page:

In this we will decide which way we need to go like which option to select.

For example we can select make a profile for appearing in placements, or view notices generated by the company directly without any interference of admin like the PPT details or interview details or list of selected students. Or we can see the academic calendar maintained by CCD admin in which he/she can update any event coming, or we can see the current statistics ongoing during placements maintained by admin as well as previous details.

```
                          STUDENT

  Profile      View        Automatic    Current    Previous Year
  Creation     Notices     Calendar     Statistics Placements
                           Updates
```

If chosen recruiters page:

In this we will decide which way we need to go like which option to select.

For example we can select make a profile for appearing during placements. He can generate the announcements on his own so that in urgency there is no need of admin approval. He can view even the students profile so as to get the detailed description about every student.

```
                     Recruiter

  Create              Update              View
  Profile             Announcements       Students
                                          Profile
```