## Design of the RMI Application:

The RMI Application is Illinois University Information. The universities that are included are UIC and UIUC. For each university, the Client can see a list of Departments and their corresponding Buildings. For each of the departments, the user can see a list of Employees and their office locations. For each employee, the client can see their contact details.

The Client (Student) initially accesses the list of universities from Server1. For other details such as Department information, Employee Office details and Employee Contact details the invocation goes from the Client to Server1. Since Server1 does not have the service to process the Client, it obtains a stub to Server2 which prepares the result and sends it to Server1. The Server1 then forwards the object to the Client.

The application consists of the following components.

**Client**: One Client which is named as StudentClient. The client calls the remote methods in Server1. The Server1 processes the client request and returns the response to the client. In some cases where the server does not contain the remote method, it calls the Server2 which in turn performs the computation and then transfers the result to the client. The Server1 then returns the object to the Client.

**Server**: Two servers which are named Server1 and Server2.

**Remote** **Interfaces**: ComputeDepartment.java, ComputeEmployees.java, ComputePersonalInfo.java, ComputeUniversities.java which contain the remote methods. Server 1 implements ComputeUniversities.java and the rest of the interfaces are implemented by Server2.

**Task** **objects**: Passed as arguments to remote methods. The task objects used are DepartmentDetailsTask.java, DisplayUniversitiesTask.java, EmployeeDetailsTask.java, and PersonalDetails.java

**Plain java classes**: UICDepartmentEmployee.java, UICEmployeeContactInfo.java, UICInformation.java, UIUCDepartmentEmployee.java, UIUCEmployeeContactInfo.java, UIUCInformation.java and UniversityInformation.java. These classes implement the task objects and they represent various information such as department, building, employee and employee contact information.