

## **Use Case Description**

**Bootstrap the system:** Admin initialises SLOCA system with given data.

**Upload data:** Admin uploads location and demographics data.

Login: A user logs into SLOCA system with their email ID and password. Admin logs in with email ID and password.

**Crowd density:** A user can see the crowd density of any floor of the SIS building on any given day and time.

**List of groups:** A user can see list of groups which provides information of the group's location and composition at a particular timing.

Student breakdown report: A user can see the breakdown of Year 2013/2014/2015/2016/2017 students, inclusive of their genders and schools.

Top-K popular places: A user can see the top-K popular places where K is an integer from 1 to 10. (eg. User keys in top-3 popular places, system returns top-3 popular places for the user)

Top-K people: A user can see the top-K people who have been in the same location as a specified person requested by user, where K is an integer from 1 to 10. (eg. User keys in top-3 people and "Ali", system returns the top-3 people who have been in the same location as Ali)

Top-K next places: A user can see the top-K places that users visit after visiting a particular place where K is an integer from 1 to 10. (eg. User keys in top-3 places and "SIS GSR2-1", system returns top-3 popular places)