Modeling and Simulation, CS302

Lab-3

Due Date:Feb 5, 2017 (Sunday)

This lab looks at two models of population spread. The problems are described in detail in the module from the book (see *sir_sars_intro_cs.pdf*)

1. **(Modeling Influenza)** Implement the SIR model of Influenza and obtain Fig. 6.2.3.

   - From the projects section implement problem 1.

   - For problem 2 in the project section first obtain the differential equations and then implement and comment.

2. **(Modeling SARS)** Read the SARS model and using Fig. 6.2.4 obtain the set of differential equations.

   - From the set of differential equations implement and comment on project questions $5 - 8$.