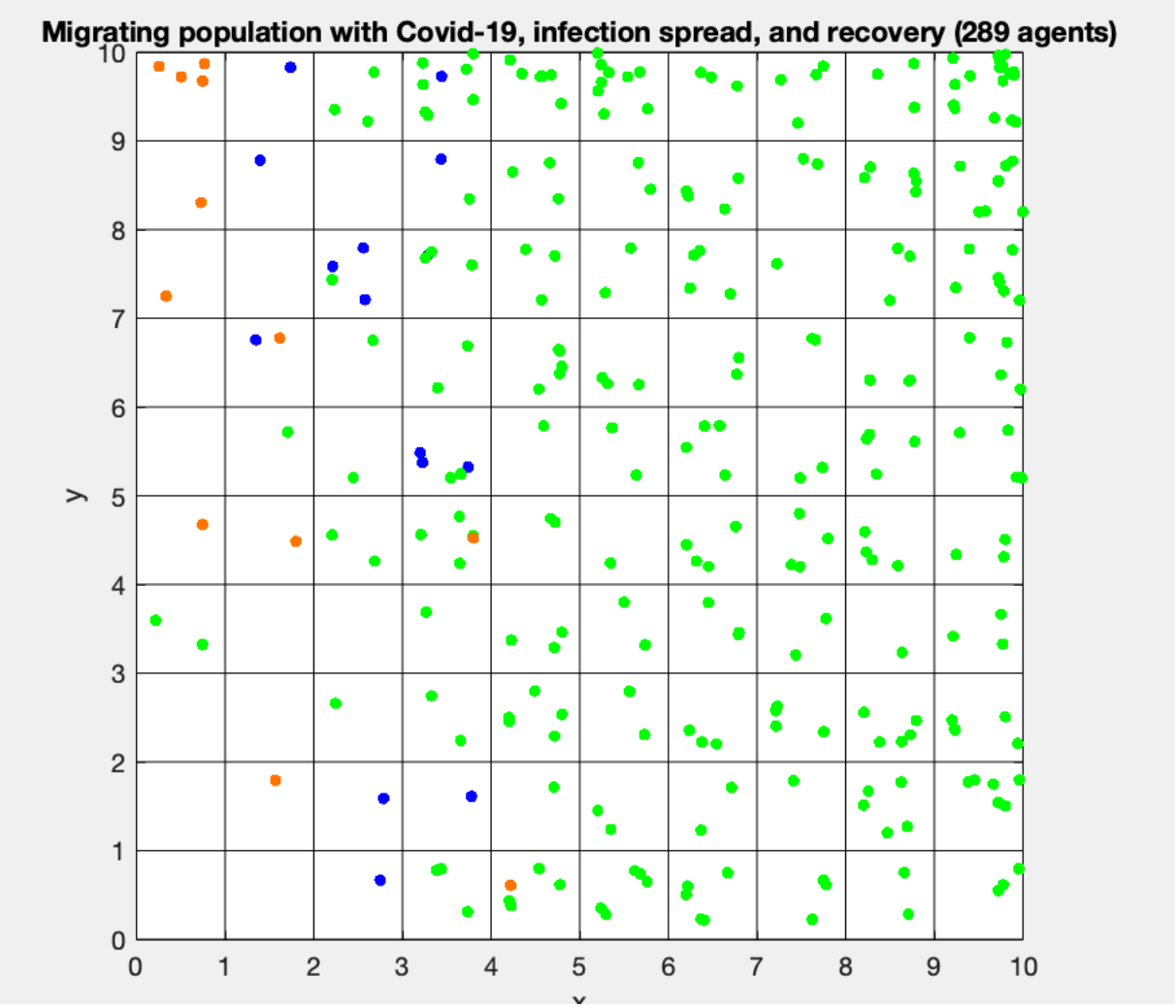
Migrating population with Covid-19, infection spread, and recovery (289 agents)
y
x
0
1
2
3
4
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6
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8
9
10

Figure 1

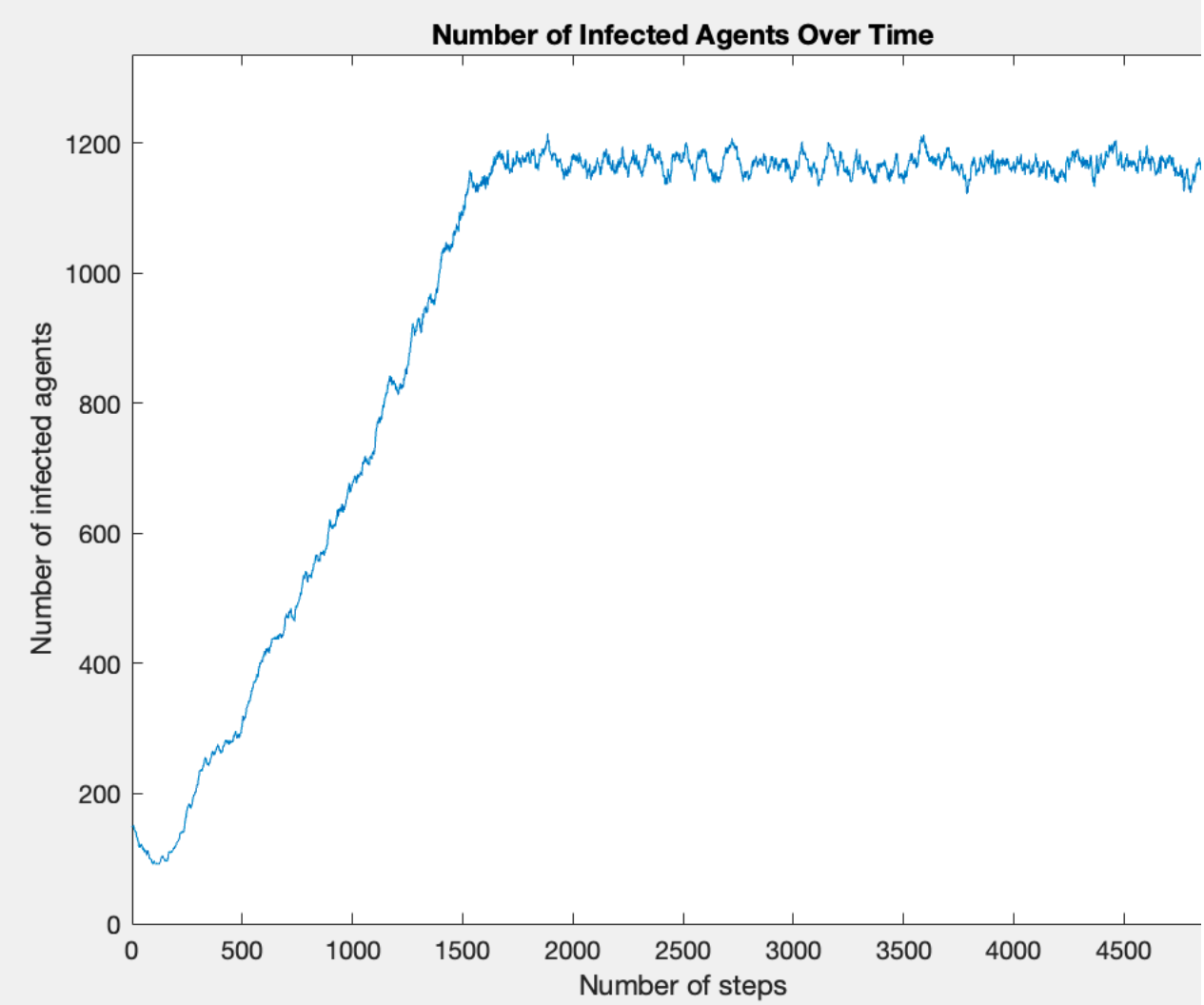

Figure 2

My project delves into the intricate dynamics of COVID-19 transmission with a nuanced focus on age differentials. The initial phase of the study centers around visually representing the health statuses of agents involved, color-coded for clarity: green denotes individuals who are healthy, blue signifies those who are infected, and orange indicates individuals who are in the process of recovery.

Following this depiction, the subsequent figure portrays the evolving numbers of infected agents over time. Initially, there's a discernible but gradual rise due to the unfortunate occurrence of agent fatalities. However, this trend quickly gives way to a steep ascent as the infection spreads rapidly throughout the population, ultimately resulting in oscillatory patterns.

Moving forward, my project aims to introduce age as a crucial factor in the transmission dynamics. Each agent will be assigned an age category, allowing for the implementation of age-specific infection probabilities. It is anticipated that very young and elderly individuals will exhibit higher probabilities of infection, whereas those within the age bracket of 15 to 50 will likely have comparatively lower probabilities, reflecting the nuanced interplay between age and susceptibility to COVID-19.