Form 1: Project Information Form

1. **Team No: 22**

2. **Project Title:** Emergency Evacuation Simulation Using ABMS

3. **Team details:**

SI.No	Hall ticket number	Name
1	20EG105612	C. Hithisha
2	20EG105613	Deepshika Thakur

4.Problem Statement: Existing methods for simulating crowd evacuations through fire drills lack the realism needed to effectively prepare individuals for real emergencies, leading to potentially dangerous outcomes during actual evacuations. Multi-agent systems offer a promising approach to address this issue by modeling individual behaviors in emergency scenarios more accurately. By encoding panic levels to simulate irrational and chaotic behaviors observed during stampedes, these systems can provide insights into the factors influencing human stampede effects and offer informed recommendations to enhance survivability in crowd evacuations. This project aims to utilize agent-based modeling to simulate crowd evacuations where the risk of fire and potential stampedes is heightened.

5. **Source of Project:**

Source: IEEE
Year: 2021
Authors: Fuyu Wang, Xiao Xu, Mengkai Chen

6. **Final Outcome:** Contributes to improved emergency preparedness and safety measures for large-scale events.

7. **What are the parameters considered for project evaluation?**
   - Accuracy
   - Simulation Realism
   - Effectiveness in Stampede Replications

8. **Development Environment:**
   - NetLogo

Signature: Team members **Signature Supervisor:**