PES University, Bengaluru

Department of Computer Science and Engineering

UE22CS352A: OBJECT ORIENTED ANALYSIS AND DESIGN

Lab 4 : Activity Diagram(With Swimlanes)

This metro ticketing system ensures commuters enjoy a smooth and efficient travel experience while empowering metro authorities to manage operations effectively. Whether for daily commuting or occasional trips, the system is designed to simplify urban travel and make metro systems a reliable backbone of city transport.

The metro ticketing system is designed to make city travel easy and efficient. Commuters can either use a metrocard or buy a token with cash. If they already have a metro card, they can go straight to the security check. Those without a card can buy a token or recharge their metro card at a kiosk or help desk. Frequent travelers may prefer a metrocard for faster access.

After getting their ticket (token or metro card recharge), commuters proceed to the security check. This includes scanning bags through an X-ray machine and a metal detector check by metro officials.

Next, commuters move to the metro gates. Metro card users must tap their card on an RFID reader, which checks if they have at least ₹50. If the balance is low, they need to recharge at a kiosk or help desk before entering. Token users simply insert their token into the slot, and the gate opens.

After passing through the gates, commuters head to the platform and board the metro. This system makes metro travel smooth for passengers while helping metro authorities manage operations efficiently. It ensures a simple and hassle-free journey for all commuters.