**RegisteredUser**

Context RegisteredUser

inv: self.phone\_number.size()=10

Context RegisteredUser

inv: password = password.matches((?=.\*\d)(?=.\*[a-z])(?=.\*[A-Z])(?=.\*[@#$%]).{6,20})

Context RegisteredUser

inv: self.search-for->ForAll (F1,F2=Flight|F1<>F2

Implies F1.flight\_number<>F2. flight\_number)

Context RegisteredUser

inv: self.cancel->cancelFlight() implies self.book-for.booking\_id->nonEmpty()

**Administrator**

Context Administrator::updateInformation()

pre:self.type\_of\_user=’Administrator’

Context Administrator::manageProfile()

pre:self.type\_of\_user=’Administrator’