

Smart Ticket Purchasing Kiosk System

You have been tasked with developing the software for a **Smart Ticket Purchasing Kiosk System**. This system is like kiosk-based TicketMaster but only for on-campus and downtown events and movies that are located on campus and the surrounding area. The hardware for the kiosk would resemble a large ATM machine with the following additions:

- a much larger full LCD touchscreen for user inputs
- speakers to allow users to listen to artists' music, watch movie trailers, concert video segments, and sports highlights depending on what events the user is looking for
- a card swipe like an ATM for paying
- a bill receptor and change dispenser if paying in cash
- a ticket printer
- Bluetooth to allow tix to be sent directly to your smart phone.

The system will also perform advertising when there is no user by displaying videos, still-frame images, playing music, etc. to try to draw attention of people passing by.

The system must talk to the following external systems:

- an external database for events which also has data on the seating floor plan for the hall and the seats available
- an external credit card authorization center
- an external music and movie trailer content database

The system should support the following users:

- student users (buyers)
- administrative users (for uploading new event information).

The system should also be able to display arenas floor plans for concert and sports events that are used by the buyer to find the best seats and select them with the trackball interface. For movie events there is no seating but the system would display all the movie times and allow purchase of tickets and viewing of trailers. For all the events the users purchase tickets for, the kiosk will either print the tickets or send them to your phone over Bluetooth.