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SG150 Software Development Cycle

June 15, 2009

Ambiguities and Omissions

Some of the things that the statement of requirements are either missing or confusing are in the interface aspect of the system. Is this a web application or is it to be a console/kiosk terminal in the train station? There is a significant difference between these two systems. For the destination, the requirements give no information on where the location data will come from, nor information like departure times or cost. Is this system supposed only to have default destinations? If this system is for more than one physical location, it will need a way to generate destinations based on the location of the station it resides in.

The financial transaction is quite vague in its description. How are prices calculated? Will there be different rates for different hours of the day? How will the credit card transaction be processed? Will it be a magnetic swipe or will users type in their information? How will this ticketing system verify the credit card transaction? How and where will the users PIN be ascertained? Will they have to generate one when they use the system? The monetary aspects of this system are not addressed at all. We assume that an encrypted link with a CC processing system will be used but how can you assume anything dealing with users’ monies?

Can users purchase more than one ticket or book tickets for future travel? What about buying tickets for someone else? The requirements, as they exist now, leave all of this up to the imagination of the developer. The document does not address the actual tickets, either. Will these be e-tickets or physical tickets? Will the system present a receipt or will the ticket be the proof of transaction?

The following is how I would remedy these ambiguities and omissions.

**An automated ticket issuing system for selling rail tickets shall be implemented. This system shall have terminals or kiosks located in the stations such than users will be able to purchase tickets with a credit or debit card. This kiosk will have a screen, a track ball and buttons which will be used like mouse buttons for selecting menu options, a ticket printer to dispense the tickets and a magnetic strip reader for credit cards. The system shall have the following functionality: There will be a start button on the screen which users can select with the trackball. Once selected, a list of destinations relative to the location of the station will be presented to the user. This list will show the destination and the cost of a ticket for this destination. When the users select their destination a new screen will be presented with the price of the ticket, distance to the location in local units, duration of the trip rounded to the nearest minute and the option to select a one-way or round trip ticket. If round trip is selected the price will be updated accordingly. The user will then select if they wish to confirm the purchase or cancel the transaction. Upon confirmation, a screen will display which will redisplay all the information for the transaction so the user can verify the information. When the user chooses to proceed they will be asked to swipe their card. The system will then make use of a credit card processing facility to be determined to process the transaction. If the transaction is valid, the system will then print out the ticket for the user. The ticket will also act as a receipt for the transaction. Once the ticket is printed the system will reset to it’s main screen and all of the users data will be erased.**