

## ATDD/BDD Try It Out

### Scenarios

Ken Pugh

kenpugh.com

#### GPS:

*As a driver, I want to find the quickest route between a set of destinations*

Name:

Find quickest route

Actor:

Driver

Stakeholders:

Passengers

Pre-conditions:

Have a mapping/route server

Post-conditions:

Quickest route

Destination List

Main course:

1. Driver enters list of destinations
2. System determines order of destinations giving the quickest route between them

Exceptions:

1a. Destination does not exist

Re-enter or cancel

2a. There are two routes of equal time according to Quickest Route rule

Driver selects one

Business rules:

Quickest Route: Quickest route is the least total time for route from current location to all destinations

Questions:

Should quickest route include return time to current location?

Should quickest route be recomputed if traffic conditions change?

*As a driver, I want to store that set of destinations so that I can retrieve it later*

Name: Store set of destinations

Actor: Driver

Stakeholder: Other drivers

Pre-conditions:

Mapping server available for destination validation

Post-conditions:

Destination list is stored with title

Main course:

1. Driver enters set of destinations
2. Driver enters title for set
3. System records set

Exceptions:

- 1a. Destination not valid  
Re-enter or cancel
- 1b. List Limitation reached  
Inform driver of rule and exit

Alternatives:

Business rules:

List Limitation: Cannot store more than one hundred lists

*As a driver, I want to have the quickest route include determination of when the destinations are open*

Name: Open Destination Route

Actor: Driver

Stakeholders:

Pre-conditions:

Mapping / route server available for route determination  
Business information server available for destination open times  
Destination List

Post-conditions:

Quickest Route for Destination List

Main course:

1. Driver selects Destination List
2. System determines Quickest Route With Open Times

Exceptions:

- 1a. No Destination List exists

Alternatives:

Business rules:

Quickest Route With Open Times: Quickest route is the least total time for route from current location to all destinations that ensures that destinations are reached when they are open

**ATM:**

*As a customer, I want to get my money out as quickly as possible without having to use a PIN*

Name: Withdraw Money Without PIN

Actor: Customer

Stakeholder: Security, Accounts Manager

Pre-conditions:

Customer has Identity Verification (e.g. fingerprint) stored  
ATM has cash

Post-conditions:

Customer has cash  
Customer Account is debited

Main course:

1. Customer supplies Account Card that identifies account
2. Customer supplies Identity Verification (e.g. fingerprint)
3. System verifies that supplied Identity Verification matches stored Identity Verification
4. Customer enters amount to withdraw
5. System produces cash in that amount
6. System records cash withdrawn

Exceptions:

- 2a. Identity Verification cannot be read  
System requests that Customer supplies it again
- 2b. Identity Verification cannot be read after three tries  
System informs Customer that he/she cannot logon and to contact customer service

service

- Use case exits
- 3a. Identify Verifications do not match  
System informs Security and Accounts Manager  
System informs Customer  
Use case exits
- 4a. Customer's account does not have sufficient balance  
System dispenses amount of balance
- 4b. Customer violates Withdrawal Limit business rule  
System informs Customer of violation  
Use case exits
- 5a. System does not have sufficient cash  
System informs Customer and dispenses amount that is available

Business rules:

Withdrawal Limit: Customer can make no more than 3 withdrawals per day

Alternatives:

- 1a. Account Card is unreadable  
Customer enters account manually

As will be shown later, this use case might be separated into two use cases to simplify it.

