1. Screen greeting: pay by credit, debit, or pay by cash at the cash register.
2. Users choose what they want to do.
   1. Credit, debit
   2. Pay inside
3. Connection sends user’s information to the bank.
   1. Correct information.
   2. Incorrect information.
4. Connection send to the screen said choose type of gas.
5. User choose type of gasoline
6. Connection unlocks the gas pump.
7. User starts to pump gas.
8. When gasoline hit the sensor, the connection locks the gas pump.
9. Connection sends to bank amount of money user used.
10. Connection sends to the screen asks if the user want receipt.
11. Connection sends information to receipt machine.
12. Connection send information to data base deduct amount of gas that is used
13. Connection shutdowns connection from the user account to the machine.
14. Connection creates new space in memory to accept new customer.

Gas

Connection

Bank

Screen

|  |  |
| --- | --- |
| Screen | |
| Ask user choose type of Gas  Ask user choose way to pay  Ask user if they want recipt | Connection |

|  |  |
| --- | --- |
| Connection | |
| Send information of user to the bank  Send promt to user  Unlock-lock the gas pump  Calculate money send to Screen  Send payment to the bank  Hold gas information (amount, type) | Bank  Screen  Gas  Screen  Bank |

|  |  |
| --- | --- |
| Bank | |
| Get user information from connection  Verify and send back  Deduct money from user’s bank | Connection |

|  |  |
| --- | --- |
| Gas | |
| Pump gas  Deduct amount of gas from system  Add amount of gas to system | Connection |

Sequence diagram:

:Cashregister

:Gaspump

Pay

Send infomation

Send command

Pay inside

lock

:Bank

Pump gas

unlock

Send command

Change gas

Send command

Choose type

Ask type of gas

unlock

Pump gas

Send command

Pay credit

:Connection

:Screen

:User