

LOGIN PHASE

Client: start connection

Server: next request

LOOP(until valid nickname)

Client: set username

S: check username

S: invalid username

End loop

// **S:** waitForCheck - tells the client to wait to send new messages

S: check first player

ALT(if first)

S: request player number

//give player first ID

LOOP(until valid number)

C: set player number

S: check valid number

S: request player number

End loop

End alt

//**S:** ok number, next request

S: check num of players in waiting room

ALT

(if enough players)

S: num of players reached/ waiting room full

(else)

S: wait for other players

//for each player give them their ID

S: ready for new game

NEW GAME PHASE

S: send game data (id, num of players, simplified board, distribution 4 lead cards)

ALT

(If ID=2)

S: choose 1 resource

C: resource chosen

(Else if ID =3,4)

S: choose ? Resources

C: resource chosen

//4th **C:** resource chosen

S: update players faithPoints

End alt

S: next request

S: choose 2 leads

C: leads chosen

S: send game data update

S: next event

ACTIONS PHASE

S: turn changed

1.

C: market selector chosen

S: resources selected

S: new market Tray(Broadcast)

LOOP(until all resources are placed)

ALT

C: resource taken/resource discarded

(If resource taken)

S: next resource

(Else)

S: update faithTrackPoints (Broadcast)

End ALT

End loop

//S: next event (minor action or end of turn)

2.

C: card to buy chosen

ALT

(If buy card possible)

S: buy card successful

S: update card matrix (Broadcast)

(Else)

S: next event (new action)

LOOP(until card positioned in right place)

C: card positioned

S: wrong position, change

End loop

//S: next event (minor action or end of turn)

3.

C: active production

ALT(if production not possible)

S: not successful: new event

(Else)

S: production successful

S: next event (minor action, production, or end of turn)

(Action possible in every moment of the turn)

A.

C: active leader card

ALT

(If Active card not possible)

S: next event

(Else)

S: activation successful

S: next event

B.

C: discard leader card

ALT

(If discard card not possible)

S: next event
(Else)
S: discard successful
S: next event

C.
C: move resources
ALT
(If move not possible)
S: next event
(Else)
S: moved successfully
S: next event

END TURN
C: change Turn
S: turn changed (Broadcast) (send update data on player board)

LastTurnscenario
(If endGame event)
S: last round of turns (Broadcast)
S: next event

winnerScenario

S: This player won (Broadcast)
S: next event

GAMEOVER PHASE
S: game ended (Broadcast)

VOLUNTARY QUIT
C: Quit
S: quit player (S to S)
S: quit accepted

CONNECTION ERROR
S: ping
LOOP(until connection works)
//wait 10sec
ALT
(If)
C: pong
S: ping
(Else)
S: quit connection

//works similar if the client does not receive for 10sec the ping from the server