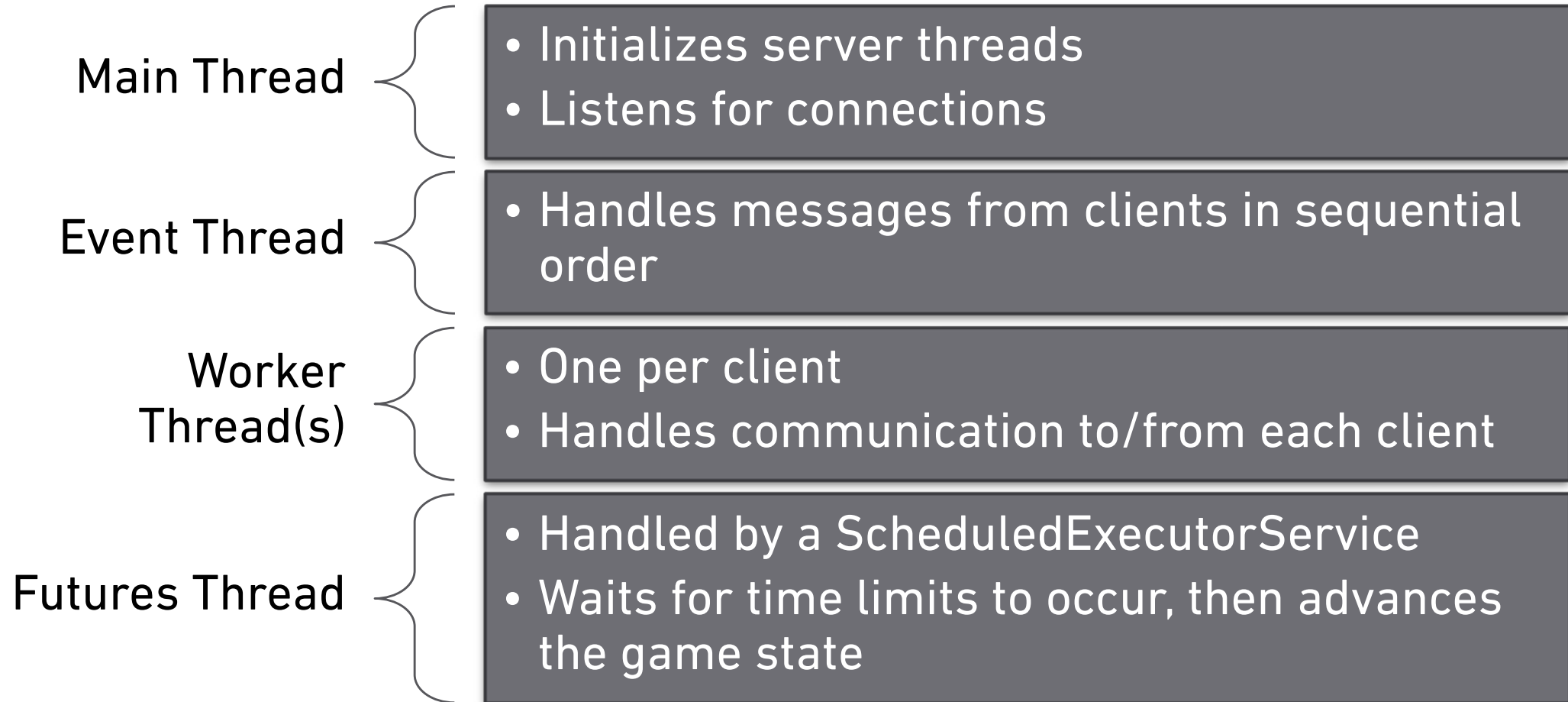


Starvation Evasion Server

Shea Polansky
UNM CS351 F2015

Server Thread Model



Not shown: Anything Simulator related, any AI processes

Communication With AI Processes

- Accomplished with Environment Variables
- Each AI is launched in a separate process that shares STDIN/STDOUT/STDERR with the server for ease of debugging.

`$SEUSERNAME`

- Username to connect with

`$SEPASSWORD:`

- Password to connect with

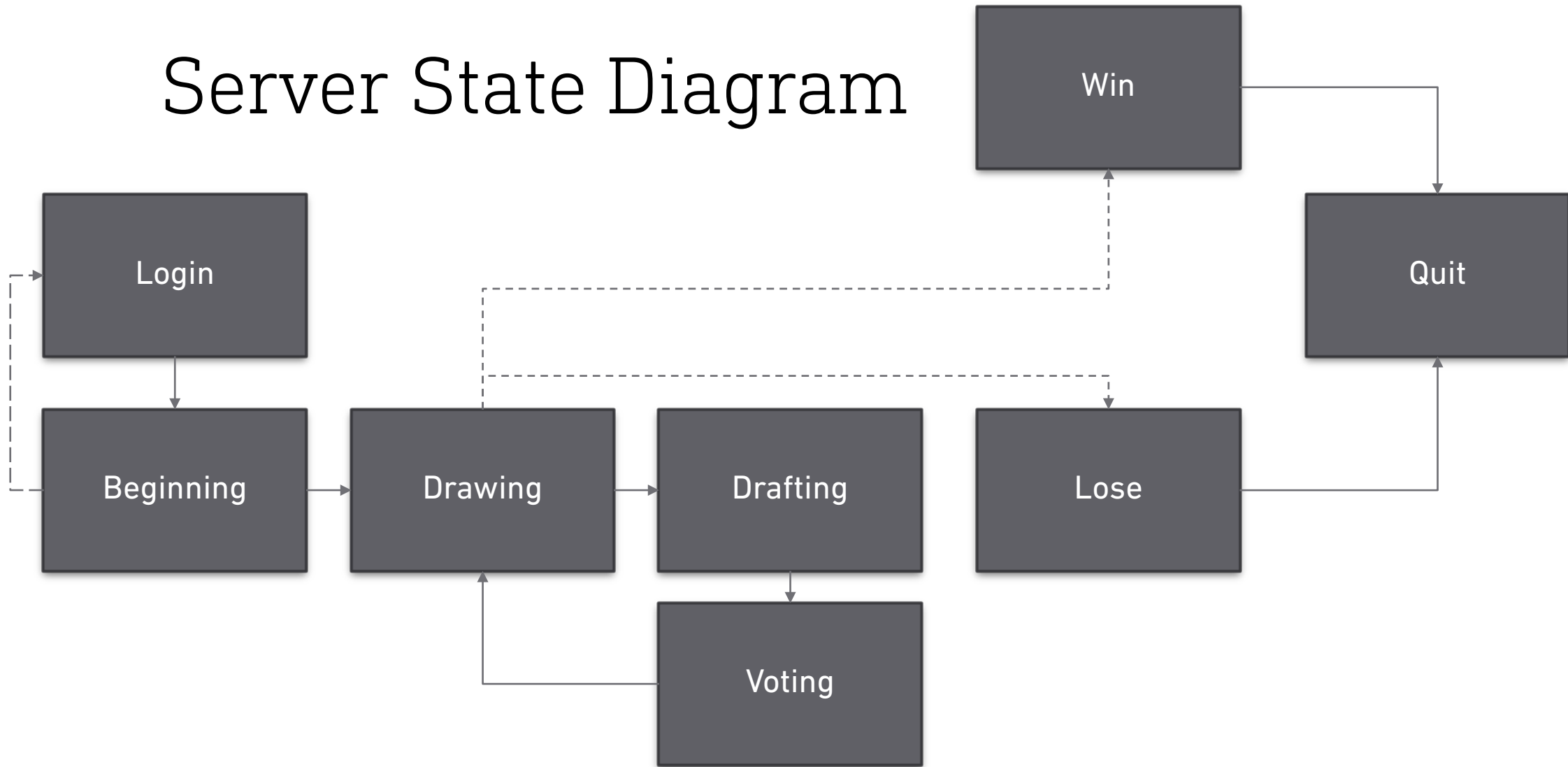
`$SEHOSTNAME:`

- Hostname of the server

`$SEPORT`

- Port to connect on

Server State Diagram



Solid lines denote primary data paths; Dashed lines denote conditional paths

Client/Server Networking

- Uses Java Serialization over TCP Network Sockets
- All messages are acknowledged by the server with a member of the Response Enum, followed by any other response information necessary.
 - Response's are only to acknowledge correct transport
 - A message may be 'wrong' (e.g. trying to log in with bad credentials) and still be acknowledged with an OK

Response.OK

- Message was correctly transmitted and received

Response.Inappropriate

- Message was inappropriate for the current server/client state

Response.Bad_Message

- Message was corrupt, or couldn't be properly deserialized

Response.Other_Error

Example Message Types

ActionResponse

- Response to drafting, voting, discard messages

AvailableRegions

- Message indicating which regions are taken

Login

- Login message containing username and hashed password

PhaseStart

- Indicates that a phase has begun, and when it ends (if applicable)

DraftCard

- Tells server to play a card.

GameState

- The current state of the world
- Also the player's hand

Thank You

Any questions?