Pheasant Game

Bobu A. Dragoș

December 8, 2022

Abstract

Technical report, Application Architecture & Implementation Details of the Pheasant Game (written in C).

Contents

1 Introduction

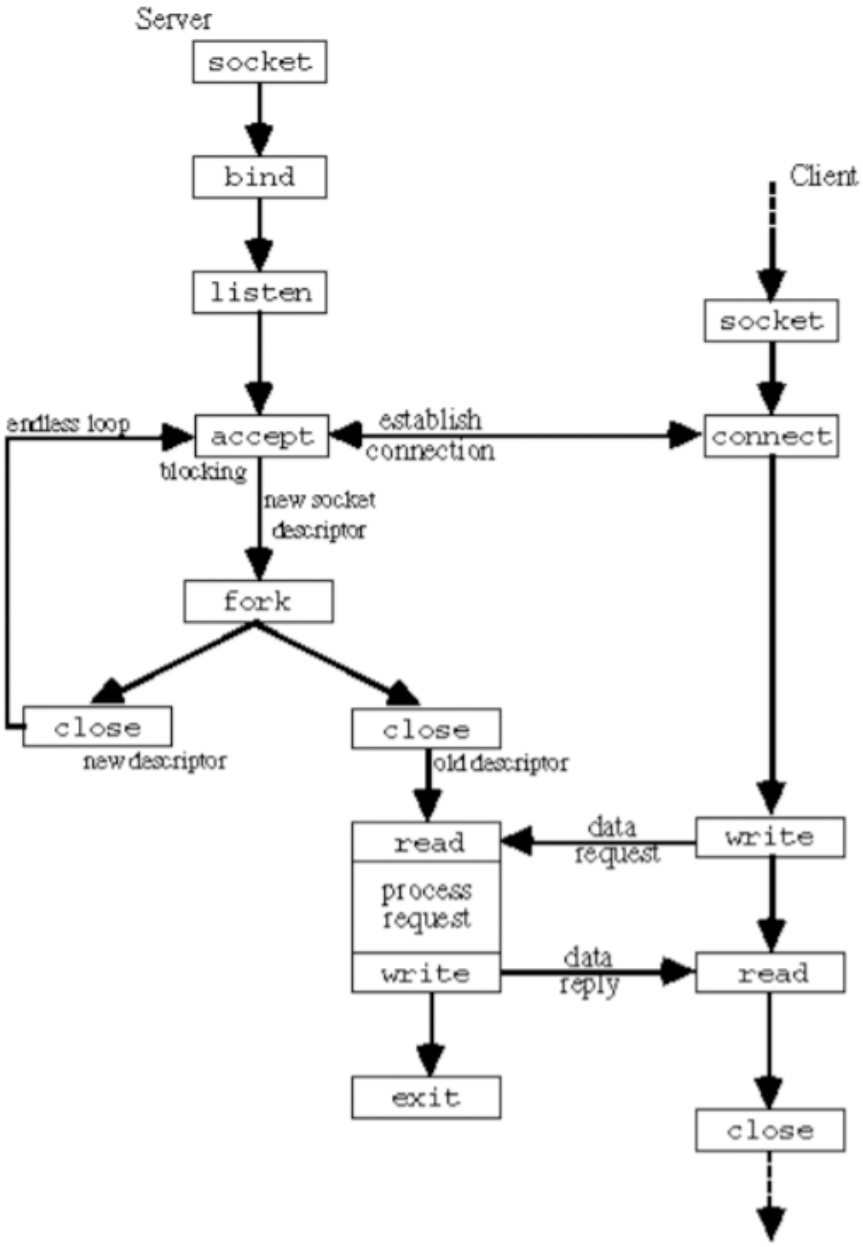
Pheasant is a computer implementation of the popular game of the same name. This paper illustrates the server functionality by providing information about the application architecture, the used technologies and also the implementation details

2 Technologies used

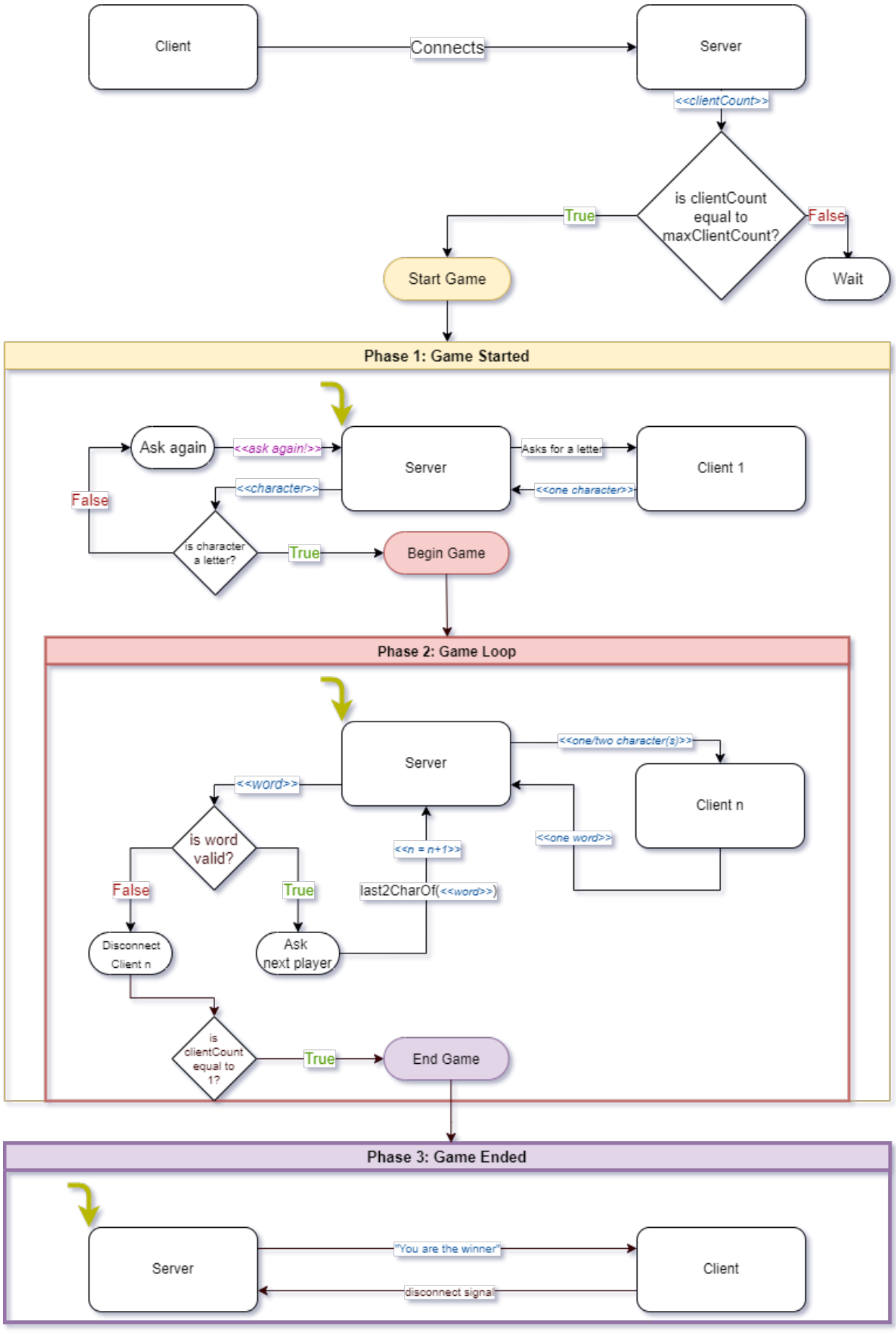
For this client-server connection an TCP model will be used. TCP standing for Transmission Control Protocol, it's ideal for this application because of its oriented transfer protocol, without packet losses.

Also, this project will benefit more from an concurrent tcp rather then an iterative one. This is because it allows the server to handle numerous clients at the same time, one client per process. So this is what will be implemented in the final version.

The server will create one execution thread for each client.



3 Application architecture



4 Implementation details

4.1 isLetter()

This function will check if the given parameter is a character between a-z or between A-Z

4.2 isWordValid()

This function will check if the first parameter is a word that appears in the dictionary and also if it starts with the 2nd string parameter

4.3 last2CharOf()

This function will return the last 2 characters of the given string.

5 Conclusions

One possible improvement could be the existence of an custom dictionary option, an option that once activated the server could use a custom dictionary besides the already-existing one.

References

Computer Networks Course Website
Draw.io (Application Architecture)