# Outline

1. Introduction
   1. Design Contrast: become familiar with the Jack language
2. Background(Logic Model)
   1. Inputs:
      1. ack OS API.pdf + Lecture 09 High-level language.pdf
      2. Recourse code from Project 9
      3. Rules of Go game
   2. Activities:
      1. Editor + Programming
      2. Partly adapted from the SquareGame provided in Project 9
   3. Outputs:
      1. A board supports basic placing pieces operation
      2. Outcomes/Impacts:
   4. As a basic of GO game(using Jack language)
3. High-level language
   1. What is High-level language
   2. Other High-level language
4. Jack language & Go Game
   1. Jack Operation System and its Application Program Interface
   2. Data structure & Algorithms
      1. Stack
      2. Queue
      3. Breadth First Search
      4. Knuth-Morris-Pratt Algorithm
      5. Hash Algorithm
   3. Build a GoBoard
      1. Build a board without Go pieces
      2. Place a chess piece
      3. Withdraw last operation
      4. Clear and Quit the program
      5. Rule 1: rule of liberty
      6. Rule 2: no circle
      7. Count the end
5. Perspective & Project
   1. Hints at Programming
   2. How does High-level language work
   3. Compared to JavaScript/HTML
6. Glossary
7. Reference
8. Additional Reading Material

Chapter 6 - Assembler

=6.0 介绍 Introduction=

特别需要留意的事项 Items worth paying special attention to

=6.1 Background=

逻辑模型

=6.2 Hack Assembly-to-Binary Translation Specification=

尽量依照原有的内容结构 Try to follow the original content structure

加入个人的学习体会 Include your own learning experience

==6.2.1 Syntax Conventions and File Formats==

==6.2.2 Instructions==

==6.2.3 Symbols==

=6.3 Implementation=

==6.3.1 The Parser Module==

==6.3.2 The Code Module==

==6.3.3 Assembler for Programs with No Symbols==

==6.3.4 The SymbolTable Module==

==6.3.5 Assembler for Programs with Symbols==

=6.4 Perspective=

=6.5 Project=

讲解题目的关键点 Elaborate on key ideas for the project

=6.6 Glossary=

关键词

=6.7 References=

参考文献

=6.8 Additional Reading Material=