FamiOwl

S-Team

S-Team: Qichao Lin, Xinyu Meng, Yuchen Wei, Wendi Huang, Chengyu Liang

1. Introduction

FamiOwl is a Game Distribution & Parent Monitoring Platform aim to provide service for both parents and children to create a safe and healthy entertainment environment for families.

2. Proposed System

Our product, FamiOwl is a game distribution platform integrated with a monitoring tool that solves the problem above. FamiOwl would count the amount of time kids spent on games, and prevent kids from playing too long in front of the computer. It would have published games that are validated for kids only. Users could also add their games to the software, and FamiOwl would monitor activities to games from both sources. Parents could control the behavior of FamiOwl and set rules for each game individually via a web page. They can see which game their kids are playing, and how much time their kids have spent on it, and close the game remotely if necessary.

2.1 Functional Requirements

FAM-001 Parents can set the time limit of game time for each of their children on the parent portal.

FAM-002 Parents can set time limits for each game separately on the parent portal.

FAM-003 Once a child reached the time limit their parents set, the game would automatically exit.

FAM-004 Parents can see how much time in total their children have played for each game on the parent portal.

FAM-005 Children can download, install, and play games in one tap.

FAM-006 Each child has their own profiles.

FAM-007 Each child has their own game libraries.

FAM-008 Each game has their own game profile page.

FAM-009 The child client can record game time for each child.

FAM-010 Parents need an account to use the parent portal and the child client.

FAM-011 The modification of any time limit rule would apply the next time the corresponding game starts.

FAM-012 The data and profiles of children shall persist when the parent sign-in to the child client on a different machine.

FAM-013 Games in the library shall have a big square icon with their names under to make them easy to select.

FAM-014 Games shall have tags for categorizing.

FAM-015 Children and parents can search games based on tags.

FAM-016 Children and parents can search games based on names.

FAM-017 Children and parents can hit "Like" to a game.

FAM-018 The game profile page shall display the number of "Likes" a game has.

FAM-019 The child client shall be able to let parents sign-up.

FAM-020 The parent portal shall be able to let parents sign-up.

FAM-021 Elements, icons, UIs shall resize and adapt automatically when the parent is accessing the parent portal on their mobile devices.

FAM-022 Parents can also set a overall time limit for any game.

2.2 Non-Functional Requirements

FAM-101 Children must use a Windows or Mac computer to run the child client.

FAM-102 Communication between the child client and the server shall be protected under SSH Tunnel.

FAM-103 The whole development must be done within the semester

FAM-104 Parents must have a web browser on their computer or phone to access the parent portal.

FAM-105 The game in the library must run when the child client is running.

FAM-106 Games other than those published on the child client would not be constrained by the rule that the parent set.

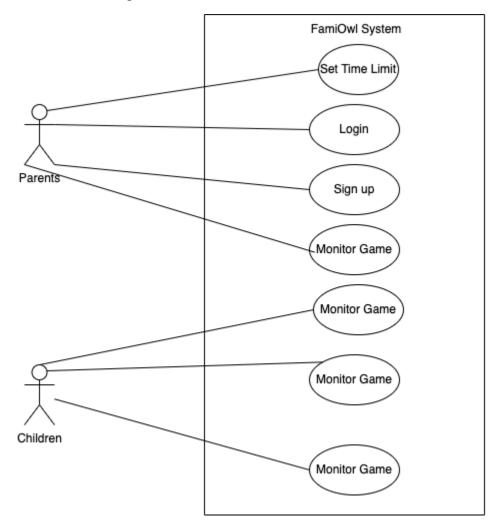
FAM-107 Parents and children must use the Rutgers VPN to connect to the database and web server if they are off-campus.

FAM-108 Children's computer must have python installed.

FAM-109 The performance of the database and web server is poor as there's no budget for renting a better server.

2.3 System Models

2.3.1 Use Case Diagram



2.3.2 Class Diagram (or Activity Diagram)

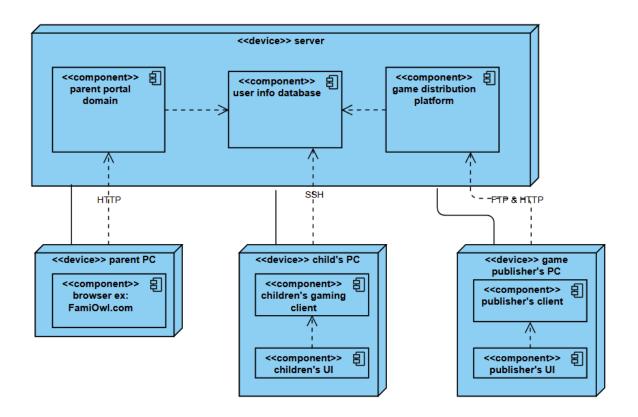
Register new Login or Register account Select Profile Main page (game inventory) Game Store Start Game Exit game Back to store Get play time from server View game detail Time exceed Start game Rayment Buy game Fail Payment Sucess Time exceed Ending game Confirmation page because of exceed of

time notification

If you use Activity Diagram, you may need to include multiple diagrams. Each Acti

vity Diagram shows the workflow of one use case.

2.3.3 Deployment Diagram



2.3.4 User Interface

Navigation Paths/Interface Design.

