Flappy Angry Birds!
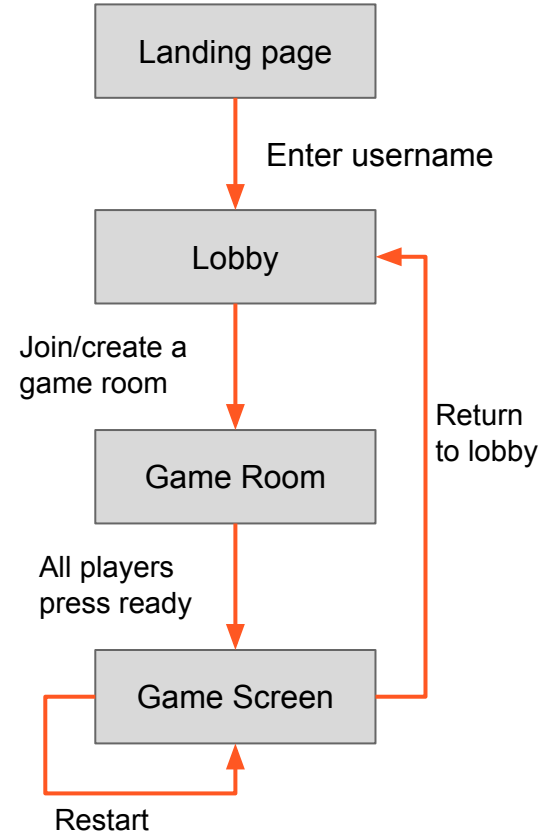
An online & real-time multiplayer game!

COMP 307 Project

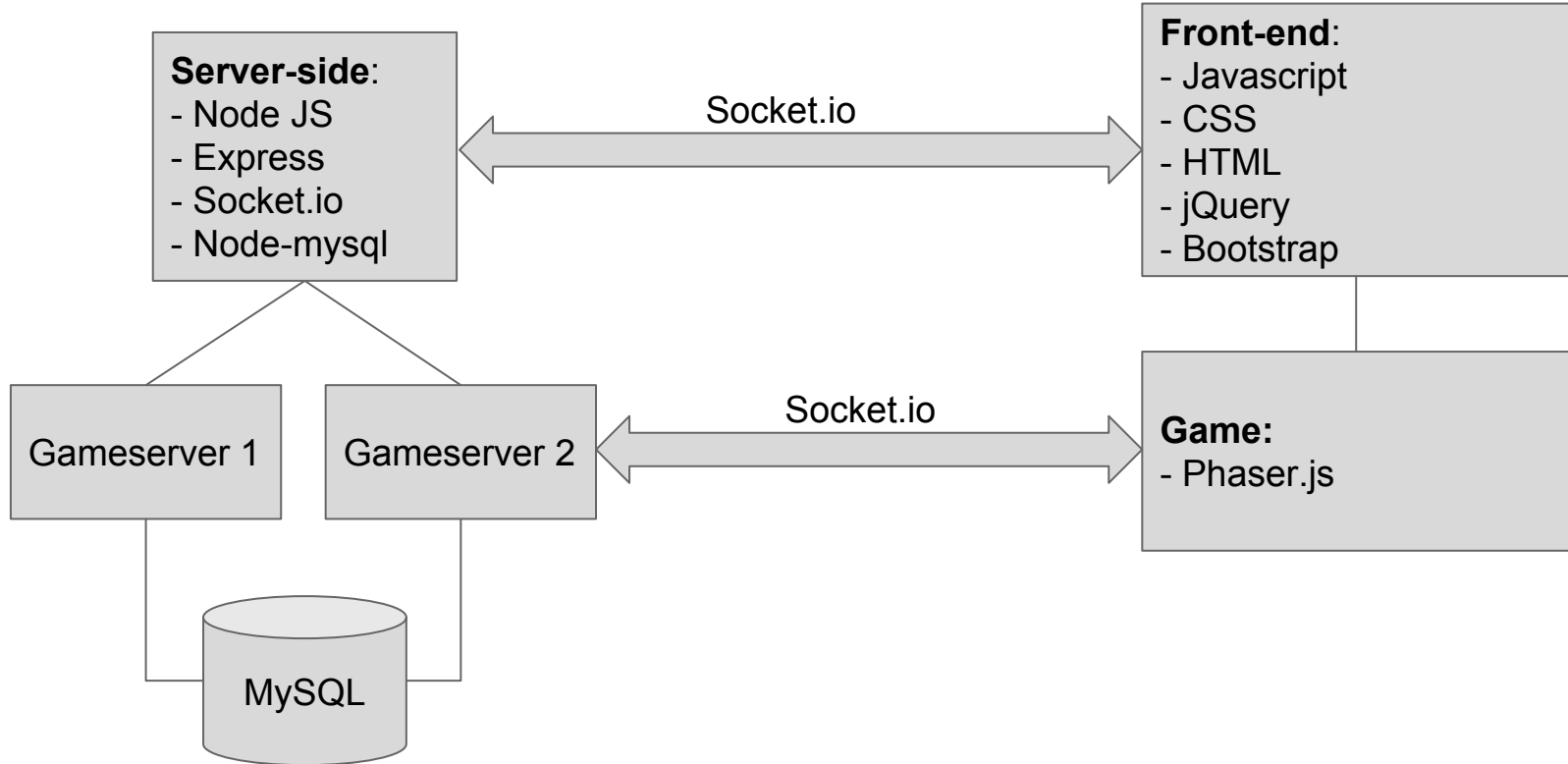December 7th, 2015

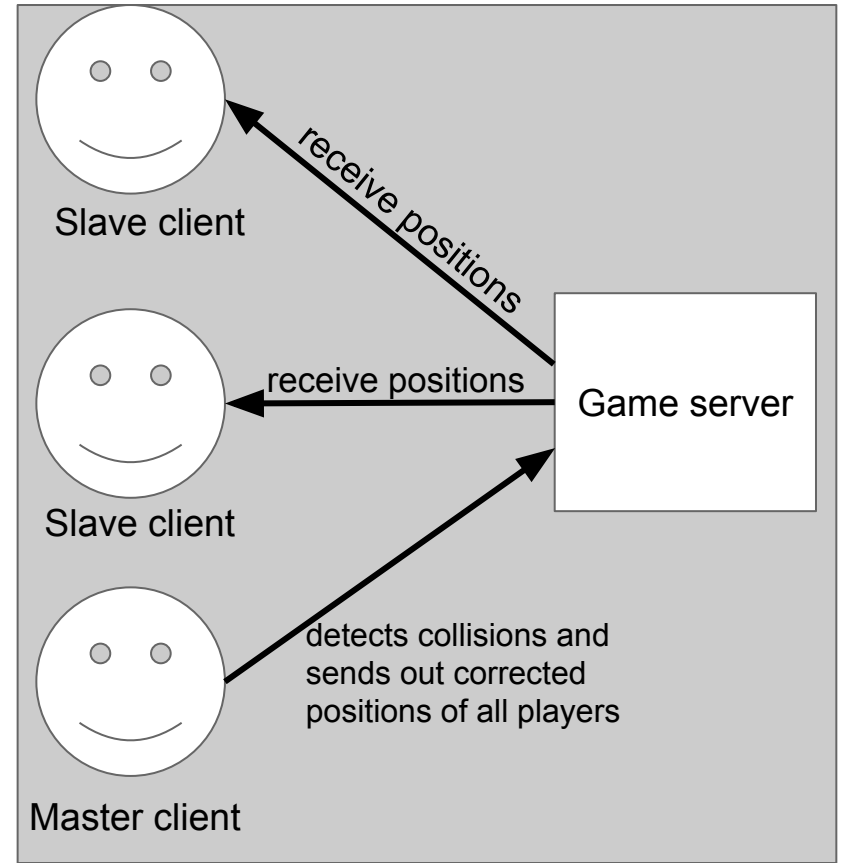**Rudolf Lam, Emil Rose, Monica Ung**
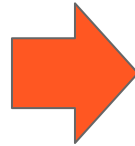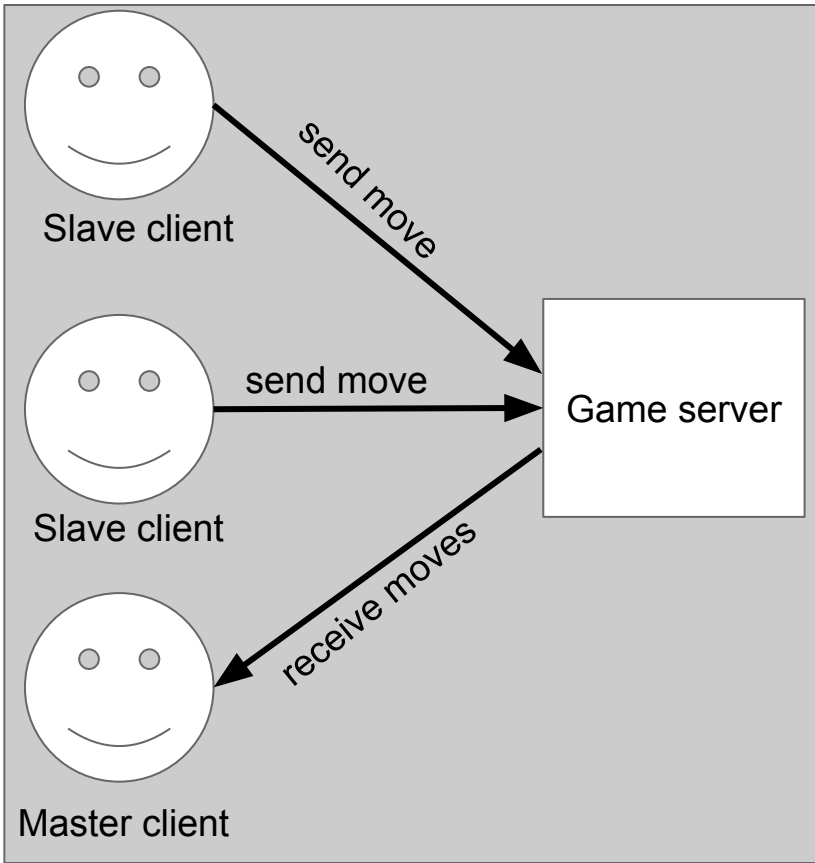
The Website

- Just pick a username and hop into a lobby with some friends
- Create or join a game room
- Once everyone readies up, the game starts
- Try to survive while bumping your opponents out of the way

Landing page

Enter username

Lobby

Join/create a game room

Game Room

All players press ready

Game Screen

Return to lobby

Restart

Architecture

Server-side:
- Node JS
- Express
- Socket.io
- Node-mysql

Socket.io

Front-end:
- Javascript
- CSS
- HTML
- jQuery
- Bootstrap

Gameserver 1

Gameserver 2

Socket.io

Game:
- Phaser.js

MySQL

Making it real-time & multiplayer

Things we learned - Positive

- Node.js lets you work quickly: full stack Javascript and easy to install packages with NPM
- Socket.io makes basic network communication pretty easy
- Phaser.js makes game programming pretty easy
- Sass + Bootstrap gives you compact and responsive CSS
- Nice to make something that is fun to use and design

Things we learned - Negative

- Javascript is inconsistent and dynamically typed: lots of console.log debugging
- Hard to get things working on multiple browsers: e.g. Firefox caches more heavily, sounds play differently
- Node packages are easy to install but often poorly documented, hard to use
- Difficult to do real-time communication between many clients, keep track of shared state
- Phaser does not support multiplayer and is not meant to be at server side

Thank you

Questions?