

# PacMacro Specification

Computing Science Student Society

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## 1 Description

This is the official specification for the game *Pacmacro*.

*PacMacro* is a game organized and run by Simon Fraser University's Computing Science Student Society during Frosh Week, each September. It is a variation on the classic game *Pac-Man*.

## 2 Summary

Of the teams of players, a single team is determined to be the 'Pacman' team, and the other teams are determined to be the 'Ghost' teams.

One player from each team plays in downtown Vancouver; the other players play at Simon Fraser University.

### 2.1 Objective of the Game

The goal of the game for the Pacman is to eat all pellets on the map before the time runs out, without being caught by the Ghosts.

The goal of the game for the Ghosts is to catch the Pacman before they eat all the pellets or delay the Pacman until the time runs out.

The game ends when any of the following scenarios occurs:

1. The Pacman eats all of the pellets.
2. A Ghost catches the Pacman.
3. The Pacman catches all of the Ghosts while the *red pellet* is active.
4. The Pacman runs out of time.

## 3 Gameplay

### 3.1 Formal Rules

- The players are grouped into teams, only one of which is the Pacman team and the remainder of which are Ghost teams.

- For each team, one player plays the game in downtown Vancouver and the other players play the game at the Simon Fraser University Burnaby campus in a control room.
- The player located in downtown Vancouver communicates with the rest of their team in the control room through a phone call.
- The players in the control room may use the PacMacro mobile application to see the map of the players' locations. The Pacman team will be able to see the locations of all players (the Pacman and all Ghosts), while the Ghost teams will only be able to see the locations of the Pacman and their own Ghost player [clarification needed].
- If Pacman eats the *red pellet*, then a period begins during which the Pacman may eat the Ghosts in a reversal of roles [behaviour of the ghosts after being caught has yet to be determined].

### **3.2 Boundaries and Limits**

- The players in downtown Vancouver may not garner any knowledge of the Pacman's location apart from the information given by their team in the control room and visually seeing the Pacman. They may not use the PacMacro mobile application during this time.
- The players in downtown Vancouver may not venture outside of the geographical boundaries set by the gamemasters.
- The players at SFU may not intentionally listen to the other players' conversations to gain better knowledge of the other teams' positions.
- Ghosts may not loiter in a specific location in order to block the Pacman. This is up to the discretion of the gamemasters during the game.