Per Lundholm

Per.Lundholm@crisp.se

Abstract

A formal specification for the agile game “tap the shoulder”.

Tap The Shoulder

Specification

**Table of Contents**

[Feature: Game Flow 2](#_Toc36717598)

[Feature: Game Execution 2](#_Toc36717599)

[Feature: Player movement rules 4](#_Toc36717600)

[About this document 5](#_Toc36717601)

# **Feature**: Game Flow

The game has the following phases: gathering, assignment, executing and reporting. A game is created when someone chose to facilitate. The game starts in phase gathering.

During the gathering, the game waits for the players to gather.  
  
 The facilitator decides when enough have gathered by initiating assignment. where the game assigns each player two other players as their goals.  
  
 On the initiative of the facilitator, the execution phase is started.  
 The execution phase is when the players try to reach their targets and return to their starting position.  
  
 Whenall players are done, the game automatically enters the reporting phase and the summary report is available.

**Scenario**: Facilitator creates a new game

**Given** a user

**When** the user chose to facilitate a game  
 **Then** the user gets the role **"facilitator"  
 And** the game is in phase **"gathering"  
  
 Scenario**: Player joins a game

**Given** a game is in phase **"gathering"**

**And** a user  
 **When** the user chose to join the game  
 **Then** the user gets the role **"player"  
  
 Scenario**: Facilitator starts the assignment

**Given** a game is in phase **"gathering"  
 When** the facilitator starts the assignments  
 **Then** the game is in phase **"assignment"  
  
 Scenario**: A game in phase assignment is started

**Given** a game is in phase **"assignment"  
 When** the facilitator starts the game  
 **Then** the game is in phase **"executing"  
  
 Scenario**: Players are all done

**Given** a game is in phase **"executing"  
 And** there are **10** players in the game  
 **When** all players of the game has reached their end goal  
 **Then** the game is in phase **"reporting"**

# **Feature**: Game Execution

**Feature**: Game Execution  
 The game has an execution phase where each player has three goals to reach, a first player and second player to tap on the shoulder and finally return to their starting position. The players are assigned their goals during the assignment phase.  
  
 **Scenario**: A player gets immediately a third target, the starting point

**Given** a player at position **3**,**1  
 Then** the player has end goal to reach **3**,**1  
  
 Scenario**: As the facilitator starts the assignment, players gets two other players as goal

**Given** a game is in phase **"gathering"  
 And** a player at position **1**,**1** named **"Jill"  
 And** another player named **"Caren"  
 And** another player named **"Betty"  
 When** the facilitator starts the assignments  
 **Then** player named **"Jill"** has two goals **"Caren"** and **"Betty"  
 And** player named **"Caren"** has two goals **"Jill"** and **"Betty"  
 And** player named **"Betty"** has two goals **"Caren"** and **"Jill"  
  
 Scenario**: When a player moves close to their first goal player, the first goal is reached.

**Given** a game is in phase **"assignment"  
 And** a player at position **1**,**1** named **"P"  
 And** another player named **"A"  
 And** another player named **"B"  
 And** the board looks as:  
 **And 0 "| | | | | |"  
 And 1 "| |P| |A| |"  
 And 2 "| | | | |B|"  
 And** player named **"P"** is assigned the two goals **"A"** and **"B"  
 When** the facilitator starts the game  
 **And** the player moves in direction **"right"  
 Then** the board should look like:  
 **And 0 "| | | | | |"  
 And 1 "| | |P|A| |"  
 And 2 "| | | | |B|"  
 Then** the player has reached the first goal  
  
 **Scenario**: As a player has done the first goal and is next to their second goal, that goal is accomplished.

**Given** a game is in phase **"gathering"  
 And** a player at position **3**,**2** named **"P"  
 And** another player named **"C"  
 And** another player named **"D"  
 And** the board looks as:  
 **And 0 "| | | |C| |"  
 And 1 "| | | | |D|"  
 And 2 "| | | |P| |"  
 When** the facilitator starts the assignments  
 **Then** player named **"P"** has two goals **"C"** and **"D"  
 When** the facilitator starts the game  
 **And** the player moves in direction **"up"  
 Then** the player has reached the first goal  
 **And** the player has reached the second goal  
 **And** the board should look like:  
 **And 0 "| | | |C| |"  
 And 1 "| | | |P|D|"  
 And 2 "| | | | | |"  
  
 Scenario**: When a player has done their two goals and returned to the starting position, they are done.

**Given** a game is in phase **"gathering"  
 And** a player at position **3**,**2** named **"P"  
 And** another player named **"A"  
 And** another player named **"B"  
 And** the board looks as:  
 **And 0 "| | | |A| |"  
 And 1 "| | | | |B|"  
 And 2 "| | | |P| |"  
 When** the facilitator starts the assignments  
 **Then** player named **"P"** has two goals **"A"** and **"B"  
 When** the facilitator starts the game  
 **And** the player moves in direction **"up"  
 And** the player moves in direction **"down"  
 Then** the player is done  
 **And** the board should look like:  
 **And 0 "| | | |A| |"  
 And 1 "| | | | |B|"  
 And 2 "| | | |P| |"**

# **Feature**: Player movement rules

A game that is on phase execution allows the player to move across the board. The player cannot move off the board or move to a square that is occupied by another player.  
  
 **Scenario**: Player move within the board

**Given** a board with dimensions **5**,**3  
 And** a player at position **3**,**1** named **"P"  
 And** the board should look like:  
 **And 0 "| | | | | |"  
 And 1 "| | | |P| |"  
 And 2 "| | | | | |"  
 When** the player moves in direction **"up"  
 Then** the player is on position **3**,**0  
 And** the board should look like:  
 **And 0 "| | | |P| |"  
 And 1 "| | | | | |"  
 And 2 "| | | | | |"  
  
 Scenario**: Player can't move to an occupied square

**Given** a board with dimensions **5**,**3  
 And** a player at position **0**,**0** named **"P"  
 And** another player named **"A"  
 And** the board looks as:  
 **And 0 "|P| | | | |"  
 And 1 "|A| | | | |"  
 And 2 "| | | | | |"  
 When** the player moves in direction **"down"  
 Then** the player is on position **0**,**0  
 And** the board should look like:  
 **And 0 "|P| | | | |"  
 And 1 "|A| | | | |"  
 And 2 "| | | | | |"  
  
 Scenario**: Player at the bottom edge of the board

**Given** a board with dimensions **5**,**3  
 And** a player at position **1**,**2** named **"P"  
 And** the board looks as:  
 **And 0 "| | | | | |"  
 And 1 "| | | | | |"  
 And 2 "| |P| | | |"  
 When** the player moves in direction **"down"  
 Then** the board should look like:  
 **And 0 "| | | | | |"  
 And 1 "| | | | | |"  
 And 2 "| |P| | | |"  
  
 Scenario**: Player at the top edge of the board

**Given** a board with dimensions **5**,**3  
 And** a player at position **1**,**0** named **"P"  
 And** the board looks as:  
 **And 0 "| |P| | | |"  
 And 1 "| | | | | |"  
 And 2 "| | | | |"  
 When** the player moves in direction **"up"  
 Then** the board should look like:  
 **And 0 "| |P| | | |"  
 And 1 "| | | | | |"  
 And 2 "| | | | | |"**

# About this document

This was created by copy and paste from the executed specifications.