BubbleMan
by team iNoodle Squad

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Game Interface

Introduction

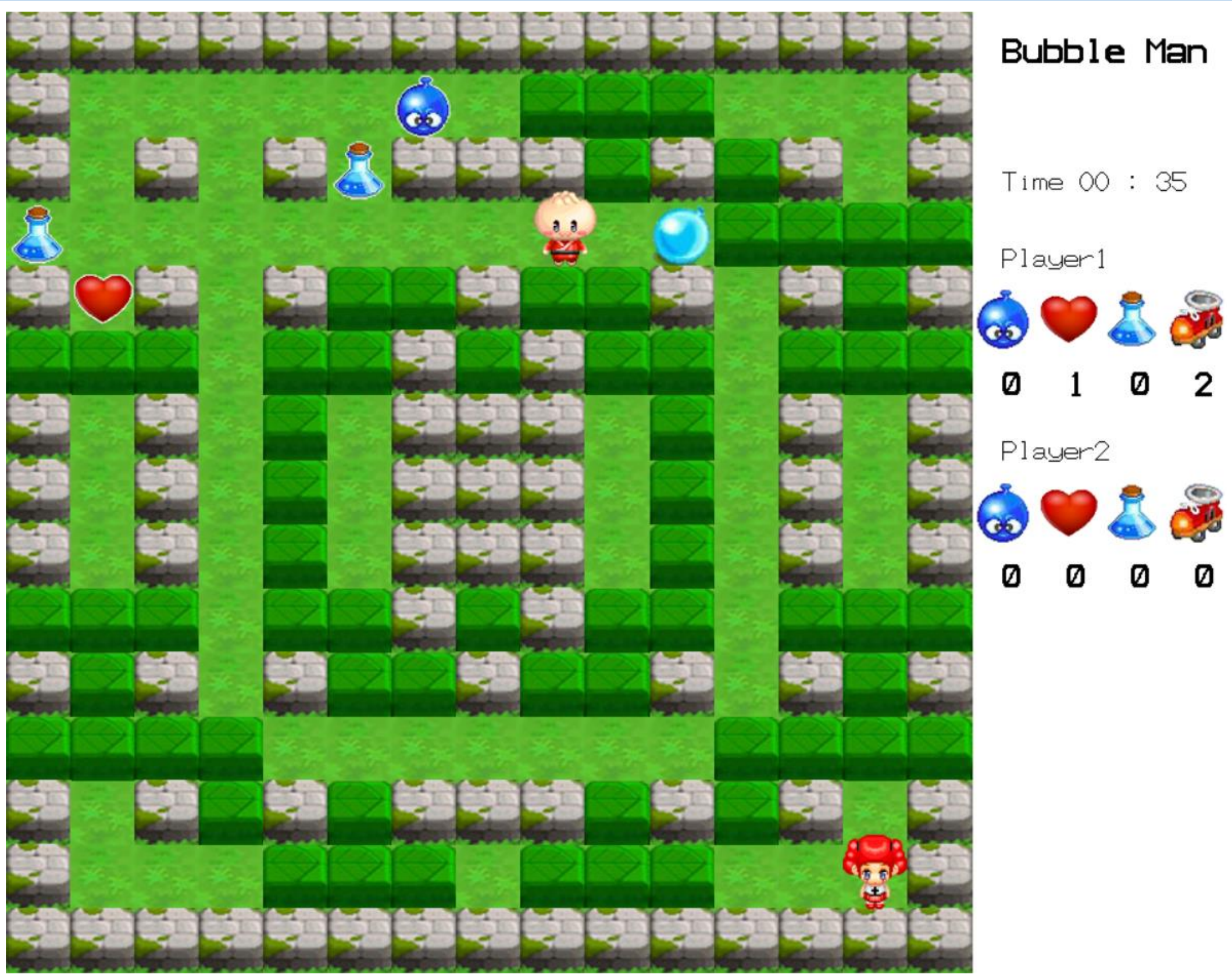**BUBBLE MAN** is a two-player entertaining game.

Players – lay bubbles on the map, try not to be killed by the exploded bubbles, get the tools to strengthen different abilities

bubbles – explode in a few seconds after laid

If the player fails to escape from the explosion, he will be trapped in a bubble and die in a few seconds.

Tools –

a) Rollerblading Shoes: speed up the player;

b) Red Heart: give players extra lives;

c) Magical Potion: increases the range of explosion;

d) Bubble Baby: increases the limitation of the number which a player can put simultaneously.

Data Structure

class Map
• int StateMap
• int ToolMap
• bubble BubbleMap

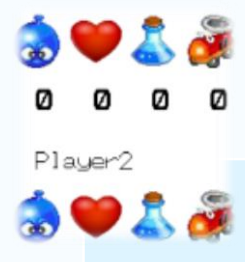• CheckExplode()
• AdjacentExp()
• CheckSetState()
• Draw()

class player
• Place
• Velocity
• ToolNumber
• State

• LayBubble()
• AddTool()
• Move()
• Draw()

class bubble
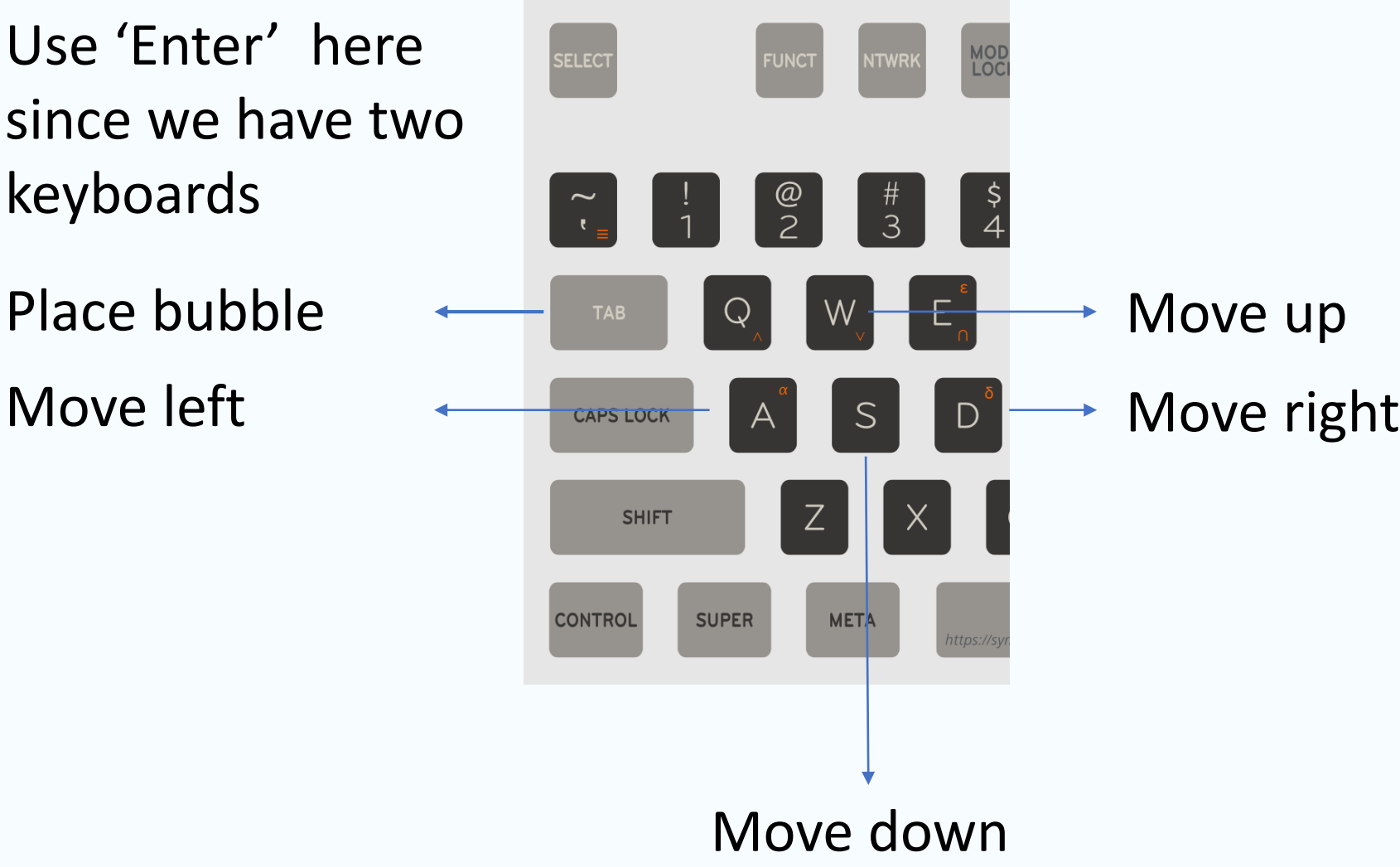• Place
• PlayerID
• Range
• State

• CheckTime()
• Draw()

class Menu
• P1Parameter
• P2Parameter

• Draw()

Technical Difficulties

1 The original PNG object in Map will be destroyed after Map object was used in functions by copy.

Solution – Using reference instead of the copy of the object.

2 Explosion of bubbles should be independent means that several bubbles can explode at the same time.

Solution – Knowing that the bubbles will not be more than 15*15, we set 15*15 bubble objects located on each patch to reach our goal.

3 One player can only move to one direction in a single moment. And movement of two players should not be affected by each other.

Solution – Set flags to check each player so that movement won't conflict.

4 If a bubble is in another bubble's explosion, it should also be detonated.

Solution – Using the recursion of CheckExplosion() function

Thanks for playing!

Game controller

Player2 controller

Use 'Enter' here since we have two keyboards

Place bubble
Move left
Move up
Move right
Move down

Player1 controller

Place bubble
Move up
Move left
Move right
Move down