Dokidoki System

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# Introduction

Dokidoki aimed at being a AVG development tool based on unity3d. It could improve the efficiency to develop AVG games and also could implement the one-time-code-multiple-platform-run based on the features of unity3d.

# Related projects

## Kirikiri

## NScript

# System architecture

## System

System class is responsible for arranging every thing inside dokidoki system. It contains a world which has lots of characters and one player. These characters take behaviors to interact with each other to progress the game. Behavior is a kind of action. Action is the minimum unit of things that happens in the AVG game, such as the position changing of a character, a sentence the character spoke. Effect is another kind of action such as the start of playing a sound, the start of the video and so on.

## Script

Scripts class is responsible to recognize the script written by AVG game developer, and then compile it into action sequences for System to conduct.

### Example

Here give an example.

|  |
| --- |
| World  video src=video0;  bgm src=bgm0 mode=loop;  backgound src=background0 transition=instant;  weather type=snow level=0.2 transition=gradual speed=0.5;  天空渐渐飘下了雪花。>  在校门口隐约着有个人影。>  sound src=sound0;  我慢慢的走过去。>  dokiChan  role type=character name="character0";  move position=center transition=instant;  posture src=posture0;  face src=happyFace0;  voice src=voice001;  等你好久了。>>  face src=happyFace1;  voice src=voice002;  一直在等着你。>>  voice src=voice003;  还以为你不来了呢。>>  { //code in {} could not be skipped  world  我微笑着走了过去。>>  player  role type=player  face src=happyFace1;  怎么会呢，我们不是约好了么。>>  }  dokiChan  move position=(0.45,0,0) transition=instant; //Here, (0.45,0,0) could be 0.45  voice src=voice004;  是呢，一年前的约定。>>  player  嗯，一年过去了。>>    world  这家伙还是一点没变，仿佛时间已经抛弃了她。>>  两个人仅仅呆站这那儿，无言的看着对方。>>  weather type=sunny level=0.5 transition=gradual speed=0.5;  不经意间，雪停了>> |

### Grammar

Here is the grammar explanation.

|  |
| --- |
| dokidoki[D]:  D → S { M S } | ‘{’ S { M S } ‘}’  //{} means repeat many times or not, ‘{’ and ‘}’ just means the symbol itself  S → world \n \t A { \n \t A } \n | i \n \t A { \n \t A } \n  M → ε  A → i L | T P ;  L → > | >>  T → background | weather | sound | bgm | video | move | posture | face | voice | role  P → K = V  K → src | transition | speed | type | level | mode | position | name  V → i | c | ( c , c , c ) | “ H “ | instant | gradual | sunny | cloudy | rain | snow | loop | center | left | right | player | character  H → i { \_ i } |

|  |  |  |
| --- | --- | --- |
|  | Example | Description |
| D |  | Mostly, one script file |
| S | world  video src=video0;  bgm src=bgm0 mode=loop;  backgound src=background0 transition=instant;  weather type=snow level=0.2 transition=gradual speed=0.5;  天空渐渐飘下了雪花。>  在校门口隐约着有个人影。>  sound src=sound0;  我慢慢的走过去。> | One block of script code, start with one focused Object, maybe world or characterId (here means those lines code would focus on the world) |
| M |  | Nothing, only for compile works |
| A | bgm src=bgm0 mode=loop | Action, focused on current |
| L |  | After words symbol, means to click to next words or, click to change dialog with next words |
| T | bgm | Action tags |
| P | src=bgm0 mode=loop | Parameters for current action |
| K | src | Attributes key |
| V | bgm0 | Attributes value |
| H |  |  |