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| By: Symbiotic Games |
| Dragons’ Reign |
| Technical Design Document |

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| 8/2/2013 |

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# Hardware

1. Physical
   1. Input Devices: Android 2.2 (froyo)

# Hardware abstraction layer

1. Java
2. AndEngine

# User interface

1. Responds to touch events and input is processed.

# Graphics Engine

AndEngine

1. Game Engine Information
   1. Sprite based
   2. 2D
   3. Top down
2. Collisions
   1. Collisions check automatically with solid sprites.
3. Update Cycle
   1. Dragons’ Reign uses 30 frames per seconds (fps).

# Sound and Music

1. Multiple Sound Types
   1. Level music plays continually in a loop.
   2. Battle music plays continually in a loop
   3. Menu music play continually in a loop
2. Music Types – Music has not been finished.
   1. MP3

# Game Data

1. Resources
   1. Sprites:
      1. DragonsReign.png
      2. AndEngine.png
      3. ButtonSrpite.png
      4. WarriorSprite.png
      5. ClericSprite.png
      6. RangerSprite.png
      7. WarriorPortrait.png
      8. ClericPortrait.png
      9. RangerPortrait.png
      10. TribesPeople.png
      11. Maggots.png
      12. Lions.png
      13. Cheerahs.png
      14. Rhinos.png
      15. Wasps.png
      16. AirElemental.png
      17. AirDragon.png
      18. Yeti.png
      19. Mammoth.png
      20. Eskimo.png
      21. DireWolf.png
      22. Dwarf.png
      23. IceElemental.png
      24. FrostDragon.png
      25. MinorHealthPotion.png
      26. MajorHealthPotion.png
      27. SuperiorHealthPotion.png
      28. MinorResourcePotion.png
      29. MajorResourcePotion.png
      30. SuperiorResourcePotion.png
      31. BasicRevivePotion.png
      32. FullRevivePotion.png
      33. Antidote.png
      34. LHelmet.png
      35. MHelmet.png
      36. HHelmet.png
      37. LUpperTorso.png
      38. MUpperTorso.png
      39. HUpperTorso.png
      40. LLowerTorso.png
      41. MLowerTorso.png
      42. HLowerTorso.png
      43. Ring.png
      44. Amulet.png
      45. Shield.png
      46. Stave.png
      47. ShortBow.png
      48. Arrow.png
      49. Bolt.png
      50. OneHandedSword.png
      51. OneHandedAxe.png
      52. OneHandedMace.png
      53. TwoHandedSword.png
      54. TwoHandedAxe.png
      55. TwoHandedMace.png
      56. LongBow.png
      57. Crossbow.png
      58. Wand.png
      59. Orb.png
      60. Dagger.png
      61. Launcher.png
      62. Cannonball.png
      63. Inn.png
      64. WoodenFence.png
      65. Tree.png
      66. Grass.png
      67. House.png
      68. Boulder.png
      69. HayStack.png
      70. YellowGrass.png
      71. Fence.png
      72. BrokenWoodenFence.png
      73. Bridge.png
      74. LogCabin.png
      75. RockPatch.png
   2. Music:
      1. MenuMusic.mp3
      2. BattleMusic.mp3
      3. StartingLevelMusic.mp3
      4. PlainsLevelMusic.mp3
      5. MountainsLevelMusic.mp3
2. Level description
   1. The first level will be a small village with a few buildings and npcs that will introduce the player to the story and world.

# Event handler

1. Events
   1. In progress…

# Program structure

1. Initialization
   1. Loading resources is done up front during the initialization of the game.
2. Game loop
   1. Checks conditionals, and executes only what is needed. This prevents over processing.
3. Finalization
   1. Saving - This feature has not been implemented .

# Timing

1. The game uses a 30 fps rate.
2. Most events take place on actions.

# Class Diagrams

 



                  