**Dragons’ Reign**

**Team Lead**

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**Scope Statement**

**Project Objective**

* To develop a standalone, functioning prototype for a top-down 2D fantasy RPG on the Android platform

**Deliverables**

* Battle system
* Functioning UI (User Interface)
* Two working classes to choose from
* Two playable zones with enemies
* Completed inventory system

**Milestones**

* Finalized GDD (Game Design Document)
* Finalized TDD (Technical Design Document)
* Finished UI
* Finished battle system
* Finish character class
* Finished playable zone
* Finished major city
* Finished completed game

**Technical Requirement**

* Application must not crash
* Application maintains 30 FPS (Frames Per Second)

**Limits and Exclusions**

* Demo will be built to the specifications of the GDD and TDD
* Demo will not include micro-transactions
* Four of the playable zones and five of the playable characters will be reserved for the full release

**Game Design Document**

* **Meetings –** Meetings will consist of status reports, brainstorming, planning, and task assignment.
  + Weekly Skype meetings
    - Monday
    - Wednesday
    - Friday
  + Physical meetings
    - Mondays and Fridays for 3 hours
* **Game Details**
  + Title
    - Dragons’ Reign
      * We feel that this title is most fitting to our storyline as there are dragons reigning over the world and it’s the duty of the player to expel them and free the world from their grasp.
  + Description/feature set - Dragons’ Reign will take place in a medieval era where dragons roam free after their awakening.
    - The element that makes this game appealing is that it is a turn-based RPG on the Android, which is a rarity of its kind.
  + Purpose
    - To entertain an audience on a mobile platform, capable of being played anywhere at any time.
  + Premise
    - The player (adventurer) gets to experience a world unlike their own and feel significant by saving the world from dragons.
  + Audience and rating
    - Dragons’ Reign is appropriate for ages 13 and above, therefore we believe that the game should be rated T for Teen. According to the ESRB, this content is generally suitable for ages 13 and above. It may contain violence, suggestive themes, crude humor, minimal blood, simulated gambling and/or infrequent use of strong language.
  + Platforms
    - Android
    - iOS (possibly, licensing costs)
  + Language
    - Java
  + Engine
    - AndroidSDK
    - AndEngine
  + Genre
    - 2D Top-down fantasy RPG
  + Player mode
    - Single-player
  + Time interval
    - Turn based
      * Menu system
  + Controls
    - Touch controls
      * On-screen joystick
      * Tapping
      * Tap and drag
  + Backstory
    - The world is unaware of the presence of dragons within their peaceful societies. Until that fateful day when dragons awakened, the world was never the same.
  + Story
    - Dragons have awakened in each of the regions and the local hostile tribes now worship them as Gods. It is the duty of the player to defeat the dragons in each of the regions, shattering the hostile tribes that worship them in the process. This eventually leads to defeating the Elder Dragon to rid the world of dragons forever.
  + Challenges
    - Competitive boss fights
    - Engaging enemy battles
    - Puzzles
      * Mazes
        + Obstacles that the player must navigate through and unlock the next area.
      * Riddles
        + NPCs can lead the player astray with gossip that may or may not be truthful or helpful in any way. Some may even provide insights to treasures that otherwise would have been overlooked.
    - Locked doors
      * Each dragon (bosses) will drop a key that allows progression into a new, unexplored area. The area that you choose to explore, however, is up to you, as that key will only unlock one zone.
  + Strategies
    - Quests
      * Collect
      * Kill
    - Exploration
    - Resource management
      * Gold
      * Consumables
        + Health/resource
  + Game balance
    - All classes will be balanced based on the role and how easy/hard the enemies are.
  + Perspective
    - Top-down third-person
  + User interface
    - There will be straight-forward buttons that have no need for explanation.
      * The inventory will be represented as a bag on the screen.
    - Tiered menu system for combat
  + Audio
    - Background Music
      * Looping
      * Non looping
    - Sound effects
* **Attributes** – Each class will have one specified primary attribute that grants them additional bonuses through gear and leveling up. Concentration of that primary attribute will increase the character’s overall performance in combat.
  + Strength
    - Increases physical damage
  + Dexterity
    - Increases physical damage
    - Physical critical strike chance
  + Vitality
    - Increases base health
  + Intelligence
    - Increases spell damage
    - Spell critical strike chance
* **Classes** – Each class will have their own specialties and niches that another does not have. There are three roles: tank, healer, and damage. There are four attributes: strength, dexterity, vitality, and intelligence. There are three resources: mana, stamina, and energy. There are three different armor types: light armor, medium armor, and heavy armor. There are thirteen weapon types: one-handed swords, one-handed axes, one-handed maces, two-handed swords, two-handed axes, two-handed maces, longbows, Shortbows, crossbows, wands, orbs, staves, and launchers.
  + Resources
    - Each class has 100 of a given resource
    - Resources regenerate 10% per full turn cycle
    - Types
      * Mana
      * Stamina
      * Energy
  + Warrior – Master of brute force melee combat, capable of frightening the foe with appearance alone. Prefers the simple lifestyle of slaughtering many and enjoying a tall glass of mead on the side.
    - Character role
      * Damage
    - Primary attribute
      * Strength
    - Resource
      * Stamina
    - Armor
      * Heavy armor
    - Weapons
      * One-handed swords
      * One-handed axes
      * One-handed maces
      * Two-handed swords
      * Two-handed axes
      * Two-handed maces
  + Ranger – Master of ranged attacks, capable of killing with pinpoint precision from afar. Prefers stealing from the rich and giving to the poor.
    - Character role
      * Damage
    - Primary attribute
      * Dexterity
    - Resource
      * Energy
        + On critical hits, gain x amount of energy for next turn
    - Armor
      * Medium armor
    - Weapons
      * Longbows
        + Arrows
      * Shortbows
        + Arrows
      * Crossbows
        + Bolts
  + Cleric – Master of the healing magics, capable of giving the wounded another chance at life. Spends his free time in meditation and prayer in churches and clinics.
    - Character role
      * Healer
    - Primary attribute
      * Intelligence
    - Resource
      * Mana
    - Armor
      * Light armor
    - Weapons
      * Wands
      * Orbs
      * Staves
  + Mage – Master of the elements, capable of turning towns to rubble
    - Character role
      * Damage
    - Primary attribute
      * Intelligence
    - Resource
      * Mana
    - Armor
      * Light armor
    - Weapons
      * Wands
      * Orbs
      * Staves
  + Knight – Master of the shield, capable of stopping the heaviest attacks of foes
    - Character role
      * Tank
    - Primary attribute
      * Vitality
    - Resource
      * Stamina
    - Armor
      * Heavy armor
      * Shields
    - Weapons
      * One-handed swords
      * One-handed axes
      * One-handed maces
  + Assassin – Master of deception and sneak, capable of infiltrating the enemy’s defenses
    - Character role
      * Damage
    - Primary attribute
      * Dexterity
    - Resource
      * Energy
    - Armor
      * Medium armor
    - Weapons
      * Daggers
      * One-handed swords
      * One-handed axes
      * One-handed maces
  + Engineer – Master of ingenuity, capable of unheard creations and outwitting the enemy
    - Character role
      * Damage
    - Primary attribute
      * Intelligence
    - Resource
      * Stamina
    - Armor
      * Medium armor
    - Weapons
      * Launchers
        + Cannonballs
* **Skills** – Each class will share a basic attack (only differing in weapon type). All classes will have their own unique skills that give them a vantage point over other classes in different situations. Some can apply battle effects, applying these effects over the course of turns.
  + Character Levels
    - Demo
      * Max level 20
    - Future
      * Max level 60
  + Skill Levels

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Basic attack | Skill1 | Skill 2 | Skill 3 | Skill 4 | Skill 5 |
|  | 1 | 10 | 10 | 20 | 20 |
|  | 5 | 15 | 15 | 40 | 40 |
|  | 25 | 30 | 30 | 60 | 60 |

|  |  |  |
| --- | --- | --- |
| Level | Tier | Point |
| 1 | 1 | 1/3 |
| 5 | 1 | 2/3 |
| 10 | 2 | 1/6 |
| 15 | 2 | 2/6 |
| 20 | 3 | 1/4 |
| 25 | 1 | 3/3 |
| 30 | 2 | 3/6 |
| 35 | 2 | 4/6 |
| 40 | 3 | 2/4 |
| 45 | 2 | 5/6 |
| 50 | 3 | 3/4 |
| 55 | 2 | 6/6 |
| 60 | 3 | 4/4 |

* + Warrior
    - Basic Attack
      * No resource
    - Cleave
      * Attacks all enemies
      * 75% base damage
    - Lunge
      * Single target
      * Chance to stun
    - Execute
      * Full depletion of resource
      * Damage based on resource depletion
    - Rend
      * No initial damage
      * Chance to bleed
    - War Cry
      * Increases party damage
      * Costs half of total stamina
  + Ranger
    - Basic Attack
      * No resource
    - Fire Arrow
      * Less base damage
      * Chance to burn
    - Poison Arrow
      * Less base damage
      * Chance to poison
    - Spread Shot
      * Attacks all enemies
      * 75% base damage
    - Charged Shot
      * Charges for one turn
      * Chance to deal 2x-5x damage
    - Stun Arrow
      * No initial damage
      * Chance to stun
  + Mage
    - Basic Attack
      * No resource
    - Fire Bolt
      * Chance to burn
    - Frost Bolt
      * Chance to chill
    - Lightning Bolt
      * Chance to stun
    - Mana Barrier
      * No mana cost
      * Incoming hits deplete mana instead of health
      * Able to be toggled
    - Meteor
      * Attacks all enemies
      * Charges for 1 turn
      * Costs substantial mana
  + Knight
    - Basic Attack
      * No resource
    - Shield Slam
      * Chance to stun
    - Taunt
      * Taunts one enemy for 1 turn
    - Defensive Stance
      * Increases defenses
    - Battle Cry
      * Increases base vitality of all party members
    - Retaliate
      * Returns damage dealt
        + Capped
      * Cooldown
        + 3 turns
  + Cleric
    - Basic Attack
      * No resource
    - Heal/Life Syphon
      * On party pick
        + Heals 1 party member
      * On enemy pick
        + Deals base damage
        + Half damage dealt converted to health
    - Revive
      * Resurrects a fallen party member
    - Healing Chant
      * Charges for 1 turn
      * Heals entire party
      * Costs substantial mana
    - Empower
      * Boost to all primary stats to party
      * Costs substantial mana
    - Mend
      * Heal over time
  + Assassin
    - Basic Attack
      * No resource
    - Eye Gouge
      * Chance to blind
    - Throat Cut
      * Chance to bleed
    - Backstab
      * Charges for 1 turn
      * Chance to deal double damage
    - Stealth
      * Unable to be targeted for 1 turn
    - Disembowel
      * Full depletion of resource
      * Damage based on amount of resource used
  + Engineer
    - Basic Attack
      * No resource
    - Smoke Bomb
      * No damage
      * Chance to blind all enemies
    - Flash Bomb
      * No damage
      * Chance to daze all enemies
    - Incendiary Bomb
      * Chance to burn all enemies
    - Shrapnel Bomb
      * Attacks all enemies
      * Chance to bleed all enemies
    - The Motherload
      * Charges for 3 turns
      * Detonates and deals massive damage
      * Full resource depletion
* **Party system** – The intent of the party system is to provide the player with a choice between who their allies are and what they feel would be the most valuable assets to bring along. Some players could choose a full offensive team, whereas others could utilize a more defensive team; each of these team compositions providing different outcomes and playstyles.
  + Dynamics
    - Main player
      * Class choice
    - Party members
      * Two other classes of choice
* **Encounters –** Encounters can be either an enemy collision or a random chance mechanic, initiating the player into combat with their party. First turn is determined using a haste value (which is an internal variable not available to the player), and if the player has a high enough haste, they will go first; otherwise the enemy will attack first. Combat will continue for both sides until a side no longer has party members to fight with. Once the victor has been determined, a popup will provide a list of spoils from the enemy, allowing the player to retrieve them into their inventory if they so desire. When an enemy spoils screen appears, there will also be rations that the player can utilize to rejuvenate their health and resources, but the item is consumed in this screen only and cannot be taken into the inventory.
  + Enemies
    - Wandering
      * Neutral – engage by choice
        + Stationary
        + Harder than random encounters

Better gains

* + - * + Health/damage modifier
      * Hostile – line of sight aggro (collision = combat)
        + Stationary
        + Same difficulty as mobs in zone
    - Random
      * Chance to get into combat whilst walking about the wilds
  + One enemy can represent one to three enemies
  + Turn order based on internal haste value of the enemy
  + Each side takes turns
    - Continues until combat ends
  + Pop-up occurs at end of combat
    - Experience
    - Battle rations
      * Consumed on pickup
      * Health/resource gain
        + Does nothing if player has full health and full resource
    - Loot and inventory
      * Drag the desired items from loot box to inventory
* **Combat –** Using haste as a mechanism for turn order, players can get the advantage on enemies that are slower than they are. General cases could be that the enemy is a larger foe, thus being slower, and smaller enemies could be faster. In combat, players will have four options to choose from during their turn, which will be using a skill, swapping to an ally, using a consumable, and fleeing. If you use a skill, based on that skill, enemies will either be darkened or highlightable to use that skill on, or even your own party. Party examples would be heals, buffs, or other team-helping mechanics.
  + Combat begins
    - Player turn
      * Use skill
      * Swap to ally
      * Use consumable
      * Flee
        + Chance to escape fight

Enemy level dictates ability to escape

Higher chance to escape lower level enemies

Lower chance to escape higher level enemies

* + - Enemy turn
      * Use skill
  + Combat ends
    - Win
      * Large experience gain to participating party members
      * Screen showing player and enemy inventory
        + Drag and drop loot
        + Battle rations

Gain health and resource

* + - Loss
      * Whole party dead
      * Sent back to nearest major town
    - Experience check
      * Level up
        + Level up check

Gain skill point

* + Stationary enemies
    - Walk-up interaction
    - Line of sight aggro
  + Random encounters
  + Death
    - Main player
      * Next party member becomes lead
      * FIFO (First In First Out)
    - Ally
      * Gain less experience on win
  + Battle effects
    - Blind – chance to miss – 2 turns
    - Daze – reduced damage – 2 turns
    - Poison – damage per turn – 2 turns
    - Burn – damage per turn – 2 turns
    - Chill – reduces defenses – 2 turns
    - Stun – blocks all attacks – 1 turn
    - Bleed – damage per turn – 2 turns
* **Items/Consumables –** There are six slots for equippable gear that the player can utilize: helmet, upper torso (chest, gloves, and shoulders), lower torso (belt, pants, and boots), main hand weapon, off-hand, ring, and amulet. Equippable items can be interchangeably swapped with other pieces of gear through the inventory system. The inventory system encompasses both the player’s equipped items and what is in their bags. Consumables are able to be used out of combat through the inventory and in combat through the menu system. Stores are available throughout the world which can sell items to the player (weapons, armor, consumables).
  + Item slots
    - Helmet
    - Upper torso
      * Chest
      * Gloves
      * Shoulders
    - Lower torso
      * Belt
      * Pants
      * Boots
    - Main hand
    - Off hand
    - Accessories
      * Ring
      * Amulet
  + Stores
    - Blacksmith
      * Heavy armor
      * Weapons
      * Shields
    - Tanner
      * Medium armor
    - Tailor
      * Light armor
    - Artificer
      * Staves
      * Bows
      * Arrows
      * Bolts
    - General store
      * Health Potion
        + Minor
        + Major
        + Superior
      * Resource Potion (mana, etc)
        + Minor
        + Major
        + Superior
      * Revive Potion
        + Basic

50%

* + - * + Full

100%

* + - * Antidote
        + Cures all debuffs
* **Inventory** – Screen that provides item usage to the player and character statistics.
  + Designated starting inventory size
  + Size increased by buying bags at general store
    - Further size increased by micro-transaction
* **Zones** – There are two different types of zones throughout the world that can take a toll on the character in different ways. One being a safe zone, where players will not lose items upon death, and hostile zones that have a chance to lose items on death (another adventurer finds your body and snags your gear). The player will adventure through six different terrain types throughout the world: desert, mountains, forest, tropics, plains, and caves. Almost all zones will have their own type of terrain, but the starting area will not be devastated by a certain type of environment.
  + Types
    - Safe
      * No loss of items on death
    - Hostile
      * Possible loss of inventory items/coins on death
  + Areas
    - Unnamed
      * Terrain type
        + Unknown
      * Starter Village
      * Enemies
        + None
      * Quest givers
        + TBA
    - Unnamed
      * Terrain type
        + Plains
      * Enemies

|  |  |  |  |
| --- | --- | --- | --- |
| Plains |  |  |  |
| Enemy | Type | Skill | Battle Effects |
| Tribes People | Normal | Spear Toss |  |
| Maggots | Slow | Bite |  |
| Lions | Normal | Maul | Bleed |
| Cheetah | Fast | Pounce | Daze |
| Rhino | Slow | Charge | Stun |
| Wasps | Fast | Sting | Poison |
| Air Elementals | Fast | Gust | Daze |

* + - Unnamed
      * Terrain type
        + Mountains
      * Town
        + Cottages
      * Enemies

|  |  |  |  |
| --- | --- | --- | --- |
| Mountains |  |  |  |
| Enemy | Type | Skill | Battle Effects |
| Eskimos | Normal |  |  |
| Yetis | Slow | Snow Ball | Chill |
| Mammoths | Slow | Charge | Stun |
| Dire Wolf | Fast | Go for the Throat | Bleed |
| Dwarfs | Normal | Axe Toss |  |
| Rams | Fast | Head butt | Daze |
| Ice Elemental | Normal | Icicle | Chill |

* + - Unnamed
      * Terrain type
        + Caves
      * Enemies

|  |  |  |  |
| --- | --- | --- | --- |
| Tropics |  |  |  |
| Enemy | Type | Skill | Battle Effects |
| Land Sharks | Normal | Prey on the weak | Bleed |
| Crabs | Slow | Pinch |  |
| Turtles | Slow | Snap |  |
| Sea Gulls | Fast | Peck |  |
| Nagas | Normal | Trident Thrust | Poison |
| Snakes | Fast | Envenom | Poison |
| Water elemental | Fast | Geyser | Stun |

* + - Unnamed - Tropics
      * Enemies
        + Thieves/bandits (land sharks)
        + Crabs
        + Turtles
        + Sea gulls
        + Nagas
        + Water elementals
    - Unnamed
      * Terrain type
        + Desert
      * Town
        + Bazaar
      * Enemies

|  |  |  |  |
| --- | --- | --- | --- |
| Desert |  |  |  |
| Enemy | Type | Skill | Battle Effects |
| Sand People | Normal | Turban Wrap | Stun |
| Cactus | Slow | Spine Shot |  |
| Scorpion | Fast | Inject Venom | Poison |
| Buzzard | Fast | Peck |  |
| Golems | Slow | Sand Surge | Blind |
| Lizard | Fast | Lick |  |
| Fire elemental | Fast | Fire Whirl | Burn |

* + - Unnamed
      * Terrain type
        + Forest
      * Enemies

|  |  |  |  |
| --- | --- | --- | --- |
| Forest |  |  |  |
| Enemy | Type | Skill | Battle Effects |
| Elves | Fast | Arcane Blast |  |
| Dire Wolfs | Fast | Gouge | Bleed |
| Fae | Fast | Sparkle | Blind |
| Treants | Slow | Entangle | Stun |
| Bears | Normal | Maul | Bleed |
| Oozes | Slow | Engulf | Daze |
| Battle Frogs | Normal | Tongue Lash | Poison |

* + Bosses

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Bosses |  |  |  |  |  |
| Zone | Level | Mob | Type | Skills | Battle Effects |
| Plains | 13 | Dragon | Air | Tornado(aoe),Air Blast(SingleTarget), Air Armor(Buff) | Daze |
| Mountains | 23 | Dragon | Frost | Blizzard(aoe), Ice Blast(SingleTarget), Frost Armor(Buff) | Chill |
| Caves | 33 | Dragon | Stone | MudSlide(aoe),Rock Shards(SingleTarget), Rock Armor(Buff) | Stun – Rock Shards |
| Tropics | 43 | Dragon | Water | Hurricane(aoe), Water Torrent(SingleTarget),  Water Shield(Buff) | Daze |
| Desert | 53 | Dragon | Fire | Fire Breath(aoe), Lava Surge(SingleTarget), Fire Armor(Buff) | Burn |
| Forest | 63 | Dragon | Elder | Arcane Storm(aoe), Tail Lash(SingleTarget), Arcane Barrage(aoe),Chromatic Scales(Def Buff), Elder Wisdom(Increase Attack) | Stun – Tail Lash |

* + Zone Levels

|  |  |
| --- | --- |
| Zone | Level Range |
| Plains | 1-10 |
| Mountains | 10-20 |
| Caves | 20-30 |
| Tropics | 30-40 |
| Desert | 40-50 |
| Forest | 50-60 |

* **Fast** **travel** – Allows a quick form of transportation between previously visited zones using towns that are picked up along the way. We may or may not implement a more realistic approach to ground movement (such as a mount of some kind to get from one part of a zone quickly to another).
  + Allows travel between previously visited towns
  + Possible mount to increase movement speed
* **Micro-transactions** – A future plan (but not included in the demo) would be to provide the player a way to have an advantage over the basic player, by utilizing a second type of currency known as diamonds. These diamonds provide a feature that may improve the overall game experience by allowing access to content that is otherwise not readily available. These bonuses include: instant content access, bundles, and removal of ads.
  + Currency
    - Diamonds
  + Allows instant access to content
  + Bundles
  + Remove ads
* **Future additions** – Features that are planned to be implemented in the future but not available for the demo.
  + Professions/crafting
  + Ally inventory
  + Persistent poison damage after battles