CROWN & CONQUER

Livrabil Intermediar - Inginerie Software

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Clear definition of Problem Statement/Product vision

If you want to play something chill to blow off some steam after a long day, **CROWN & CONQUER** is the solution for you! The beneficiaries of this game would be all the people in this situation, so it is a game for everyone.

The solution: A game where the player takes on the role of a monarch who must build and expand the kingdom. They must collect resources, undertake to subdue and defend against the attacks of mysterious creatures that come in the night. Players can travel through varied landscapes, develop technologies and explore the secrets of the in-game world.

The goal of the game is to survive and expand your kingdom as much as possible. The game offers a unique simple but beautiful pixel-art graphic atmosphere.

Feature	Description	Stakeholders
Parallax Map	-Sliding with Character	A map that respects the theme
	-Has a base with buildings	of the game, with cool
	-Terrain and Environment	animations and VFX.
	Representation	
	-Location Information	
Buildings	-Structures on the map	The buildings are fundamentally
	predefined spots	to complete the game, and it
	-Upgradable	makes the game a more
	-Different types	complex one.
Portals	-Spawn enemies at the end of	The enemies make the game
	the map	more difficult to win.
	-Enemies want to catch the	
	crown	
	-Spawning number depending	
	on the level of the townhall	
Player's Inventory	-Item list	You need those materials to
	-Inventory List Vew	build constructions on the map.
	-Contains materials	
Red Night	-Happens after 10 days	You are a true player if you pass
	-Monsters are more violent	the Red Night.
	-The spawning rate increases	
White Night	-Happens after the Red Night	You need a chill night after the
	-No monsters	nightmare from yesterday night.
Jobs for NPCs	-Help of the player	You cannot advance in the game
	-Knight	alone.
	-Archer	
	-Builder	
	-Miner	
	-Farmer	

Recruits	-Recruiting NPC	When you recruit an NPC, it will
	-You give them a job	generate resources passively for
		you, or help you fight the
		enemies.

The list of product features and functionalities that deliver value to the stakeholders, aligned with the product vision/problem statement, presented in any form (tabular, diagram, mindmap).

Highlighting the features/functionalities already delivered, the ones planned for delivery during this course/project, the ones for the future releases (the same presentation form can be used: tabular, diagram, mindmap).

Feature	Status
Parallax Map	Planned for Current Course
Buildings	Planned for Current Course
Portals	Planned for Current Course
Player's Inventory	Planned for Current Course
Spawning Rate	Planned for Current Course
Red Night	Future Releases
White Night	Future Releases
Jobs for NPCs	Future Releases
Recruits	Future Releases

Define product roadmap for next and future releases



Integration points

As it is an offline game, there are not many integration points or External Sources. The User downoalds the game and installs it on its own computer.

1. Platform Integration:

Integration with the chosen gaming platforms (PC, console, mobile) to ensure compatibility and optimal performance.

2. Database Integration:

Information may be exchanged with databases, information about the game's architecture or external systems.

This includes storing and retrieving player progress, scores and other data.

Non-functional requirements

Performance

NFR: The game should have responsive controls and a smooth user interface.

SMART Definition: The response time for user actions, such as clicking buttons or moving characters, should be less than 200 milliseconds, ensuring a seamless and enjoyable gaming experience.

Usability:

NFR: The game should be easy to understand and navigate.

SMART Definition: The average new player should be able to learn the basic controls and objectives within 10 minutes of gameplay. The game interface must adhere to established usability standards

Reliability:

NFR: The game should be stable and reliable, minimizing crashes or unexpected terminations. *SMART* Definition: The game should have a mean time between failures (MTBF) of at least 50 hours, with automated error reporting and recovery mechanisms in place.

Security:

NFR: The game should protect user data and prevent unauthorized access.

SMART Definition: All user data must be encrypted during transmission and storage. Access to the game's administrative functions should be restricted to authorized personnel through secure authentication mechanisms.

Customer Journey

User Persona

Andrew Myers



Age: 25 Work: Business Analyst Family: Married Location: Bucharest

Goals

- Relieve stress.
- Unwind after work.
- Enjoy casual gaming.

Frustrations

- Andrew always feels like something is missing when playing a game.
- Andrew doesn't want to spend time gaming while looking at complicated graphics.
- Andrew needs a relaxing game, he is full of the competitive scene.

Quotes

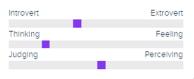
"I prefer games with minimal learning curve and especially enjoys pixel art aesthetics!"

"I just want a game that grabs me from the start, keeps me hooked with intense action, and leaves me with unforgettable moments.

Game Preference



Personality



User Journey Map

Stages:

Discovery: Users find out about "Crown & Conquer" through gaming platforms or recommendations.

Exploration: Users explore the game's features, map, and gameplay mechanics.

Gameplay: They engage in building their kingdom, collecting resources, and facing challenges.

Challenges: Users experience difficulty during the Red Night with increased monster attacks.

Success: Overcoming the Red Night makes them feel accomplished and skilled. Relaxation: Enjoy the White Night, a peaceful break from monster attacks.

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Touchpoints:

Discovery: Gaming forums, online game stores, social media ads.

Exploration: Tutorial levels, in-game guides, and tooltips.

Gameplay: Building structures, managing resources, battling enemies.

Challenges: Increased enemy spawns, surviving attacks, upgrading defenses.

Success: Advancement in the game, reaching higher levels.

Relaxation: White Night event, experiencing a calm in-game environment.

Emotional Journey:

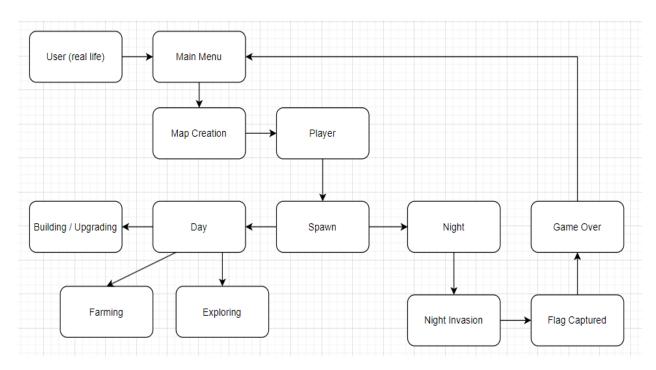
Excitement: Initial discovery and exploration of the game's potential.

Challenge: Facing difficult Red Nights, strategizing to survive.

Achievement: Successfully overcoming challenges, upgrading buildings. Relief: Enjoying the peaceful White Night after surviving the chaos.

This journey map illustrates the emotional experience and key interactions users encounter while engaging with "Crown & Conquer" catering to different gaming preferences and providing a diverse gaming experience.

Activity Diagram or State Diagram



A set of User Stories

Define user stories that add up to the time resources available

User Story 1: As a player, I want to build structures on the map so that I can expand my kingdom.

• Acceptance Criteria 1:

SCENARIO: Placing a Structure on the Map

GIVEN I have resources available (wood, stone and iron)

WHEN I select a suitable location on the map

And I choose the type of building (e.g. house, tower)

THEN the selected structure is placed on the map

And deduct the required resources from my inventory

And the structure does **NOT** appear on the map with incorrect visuals.

• Acceptance Criteria 2:

SCENARIO: Upgrading a Structure **GIVEN** I have upgraded my town hall

And I have an existing structure on the map

WHEN I select the structure And choose to upgrade it

THEN the structure's level increases

And it enhances its capabilities

And will **NOT** consume more than the necessary resources from the inventory.

User Story 2: As a game character, I want to recruit and train specialized units so that I can populate my territories more effectively.

• Acceptance Criteria 1:

SCENARIO: Hiring NPCs

GIVEN I have enough coins in my inventory

WHEN I interact with an available NPC

And I choose a job for the NPC (knight, archer, etc.)

THEN the NPC will be hired and assigned to the chosen job

And deduct the required coins from my inventory

And the NPC should **NOT** stop contributing passively (resource generation or combat),

• Acceptance Criteria 2:

SCENARIO: NPC Job Assignment

GIVEN I have hired an NPC

WHEN I decide to change the NPC's job

And select a different role (e.g., from archer to builder)

THEN the NPC's job will be updated accordingly

And the NPC should **NOT** stop performing the new role.

User Story 3: As a player, I want to explore and find resources so that I can upgrade my base.

User Story 4: As a farmer, I want to cultivate different crops so that I can manage my resources wisely to ensure a steady supply.

User Story 5: As a builder, I want to upgrade and fortify my structures over time so that my

kingdom defends against enemies.

User Story 6: As a game character, I want to be able to collect in-game currency from different

sources so that I can invest in what I desire.

User Story 7: As a player, I want to listen to relaxing music during the in-game day so that the

ambiance of the game reflects a peaceful environment.

User Story 8: As a player, I want to see my stats in an organized manner, like a profile, so that I

can keep track of my progress.

User Story 9: As a fighter, I want to battle with enemies during every in-game night, so that I can

earn more coins and develop attack strategies.

User Story 10: As a user, I want to have specific menus so that I can create a new game and

adjust the game settings.

User Story 11: As a game character, I want to have a flag in the middle of my kingdom that the

enemies can steal, so that I will be motivated to keep improving my offensive/defensive

capabilities.

User Story 12: As a player, I want to be able to ride on a horse, so that my explorations and

general travelling will be much faster.

User Story 13: As a monarch, I want to assign jobs to my recruits so that I can manage them

according to the kingdom's needs.

User Story 14: As a user, I want to interact with the structures in the world like trees, buildings,

so that I can control and analyze their properties.

User Story 15: As a player, I want to be able to see how much of each resource I own so that I

can prioritize the upgrades with higher importance.

Prioritized Product Backlog

Backlog: Work items - Boards (azure.com)

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