Technical Specification
Zarmina

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1 Executive summary

2 Style and theme

economically oriented real time base building survival

3 Story

The premise of the game will be based around early human colonists on the planet *Zarmina*. The colonists unexpectedly find this planet to be home to life which rapidly becomes hostile. Since it is a survival game, the story will not be expanded in detail.

4 Gameplay

The player will begin with
    Enemies will spawn offscreen and move towards the player's structures. On reaching the structures, the enemies will damage them until they are eventually destroyed.
    mineral deposits - must build towards and mine

4.1 Structures

There will be numerous types of structures available to the player, but not so many as to create confusion and a very steep learning curve.

Name	Description
Reactor	Provides the *power* resource. When all power cores are destroyed the game ends.
Foundation	Serves as a minor protective barrier and a platform on which to build other structures.

4.2 Enemies

There will be many varied types of enemies which will require different strategies for successful defense.

4.3 Resources

power, minerals

4.4 Endgame

There will be no win condition. Instead, the objective will be to survive for as long as possible. The game will end when all of the player's structures are destroyed.

5 Technical features

5.1 Collision detection

No sophisticated collision detection will be required. Testing for when an enemy reaches a structure can be done adequately by thresholding Euclidean distance. Enemies will elastically avoid each other, eliminating the need for precise collision detection between them.

5.2 Artificial intelligence