

CAPSULE CORP CODERZ ALTERNATIVE TIMELINE ANALYZER

ABSTRACT

- Dragon Ball Legacy Rewritten is a web-based interactive narrative game that explores an alternate timeline in which Goku never suffers the childhood head injury that transformed him into Earth's hero. Instead, players experience the consequences of their original Saiyan programming through a branching storyline where every decision influences character development, world events, and the final outcome. The objective of this project was to investigate how a data-driven branching narrative system can improve player agency, replayability, and software scalability compared to traditional linear storytelling.
- The application was developed using HTML, CSS, JavaScript, and Flask, with all story content stored in a structured JSON database. Rather than hardcoding events, the game dynamically loads narrative sequences, player choices, character statistics (Ki, Health, Infamy, and Malice), timeline progression, and multiple endings directly from the JSON file. This modular design allows developers to expand the story by editing data rather than modifying the game's core logic.
- The completed prototype features four unique origin stories, numerous branching decision points, multiple endings, collectible Dragon Balls, and a visual timeline that updates based on player decisions. Testing demonstrated that the JSON-driven architecture successfully supports complex branching narratives while maintaining consistent gameplay and simplifying future expansion. This project illustrates how separating game data from application logic creates a flexible framework for interactive storytelling and demonstrates the potential of structured data to support scalable narrative game development.

GOALS

- Deploy the UI/UX Interface and Dynamic Portrait System Move the game from a raw text build into a polished visual state. Design a clean, high-contrast, mobile-friendly interface utilizing Dragon Ball inspired color schemes, and implement evolving character portraits that shift based on Kakarot's age and active transformations.
- Fully Script and Branch the four Prologue Paths (First 12 years). Write and program all text options, choices, and RNG events for the childhood phase across all seven distinct origins (e.g., Crane School, Red Ribbon Army, Kami's Lookout). Players must be able to reach age 12 with vastly different stats and faction reputations.
- Build out the Mid-to-Late Game "What If" Sagas (After 13 years). Expand the narrative architecture to handle massive world-altering choices. Goal achievement requires mapping out how the world reacts to an evil Kakarot—whether he is conquering Earth for King Piccolo, ruling it via the Red Ribbon Army, or preparing to fight his own Saiyan heritage.

RESEARCH QUESTION

- How can a JSON-driven branching narrative system improve player agency in an interactive story?
- Does separating game data from application logic make branching games easier to expand and maintain?
- How do player choices and stat-based progression influence replayability and user engagement?

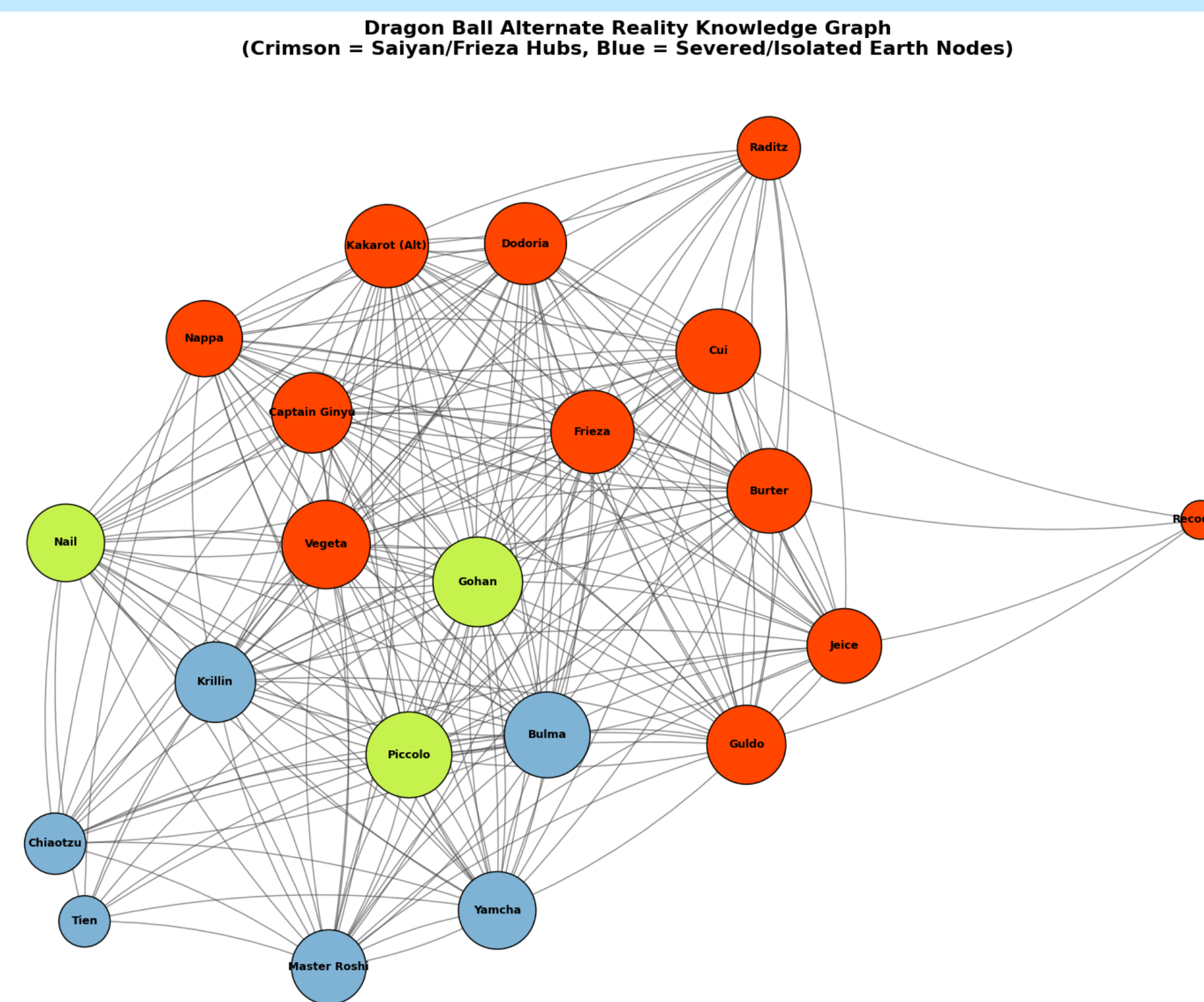
METHODOLOGY

- Designed an alternate Dragon Ball timeline with four unique story origins.
- Created a branching decision tree featuring multiple paths, endings, and secret outcomes.
- Stored all story events, player choices, character statistics, and endings in a structured JSON file.
- Built the game interface using HTML, CSS, JavaScript, and Flask to dynamically render content from the JSON data.
- Tested all story branches to verify correct navigation, stat updates, ending conditions, and overall functionality.

POSSIBLE EXPANSIONS

- Add AI-generated dialogue that adapts to player decisions.
- Implement cloud saves and user accounts.
- Expand the game with additional alternate timelines and playable characters.
- Add animated pixel-art cutscenes, sound effects, and background music.
- Store game data in a database to support online leaderboards, achievements, and future downloadable content.

DIAGRAM



RESULTS

We built a state-machine that treats narrative history as a data graph. Nodes represent events; edges represent conditional decision pathways.

RESOURCE NEEDS/LIST

Software

- HTML5
- CSS3
- JavaScript
- Flask
- JSON
- Visual Studio Code
- GitHub/GitHub Pages

Development Resources

- Dragon Ball reference materials
- Pixel art and sprite assets
- Branching story design documentation
- Testing tools and web browsers

Hardware

- Laptop or desktop computer
- Internet access for development and deployment

AUTHORS



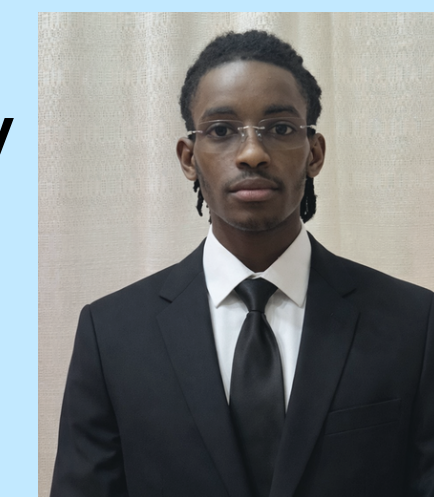
Javonte Carter
Graduate|Computer Science|Florida
A&M University
Javontecarter12@gmail.com



Joshua Chaney
Sophomore|Computer
Science|Mississippi Valley State
University
Josh.chaney12@gmail.com



Sydney Riddick
Graduate|Biology|Elizabeth City
State University
Sydneyelle03@icloud.com



Chance Walker
Junior|Computer Science|Winston-
Salem State University
gwinson@gmail.com

