



# Tech Design Document

*Thank You!*



## *What is a TDD?*

- Document created by the Development team
- Written at the pre-production stage
- Defines all technology related items
- Can be updated throughout all the process



## ***Importance of a TDD***

- Disagreements
- New members
- Idea of the final product

## ***TDD vs GDD***

### Tech Design Document

- Technical aspects
- Objective
- Game development

### Game Design Document

- Design aspects
- Subjective
- Game idea

## *Examples*

Different topics, different TDD

Same topics, different TDD

*Game  
Template*

*Warcraft II*

*Java*



## *Java's Build System*

- Platform Independent
- Easy to use
- Oracle SOA Build Server Design



## ***Game Template***

- Game Engine
- Schedule
- Art Tools



## ***Warcraft II***

- Technical goals
- Branching
- UML





## ***Features from the GDD***

- Background
- Key features
- Genre
- Target Audience
- Concept Art
- Win-Lose conditions



## ***Technical Goals***

- Innovative features, mechanics, etc.
- Has not been done before



## ***Technical Risks and Alternatives***

- Difficulties the team may encounter
- Alternatives to each of the problems
- Easier for the developers to overcome complications

## ***Estimated Schedule***



## ***External Tools to Develop***

- Used Programs
- External Libraries



## ***Code Style Guidelines***

- File Formats
- Naming Conventions
- Code Preferences



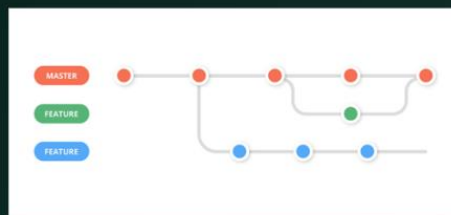


## ***Code Organization overview (UML)***

- Diagram of the code structure
- Inheritance relation between functions, structs, variables, etc.
- Is being constantly updated



## ***Branch Workflow***



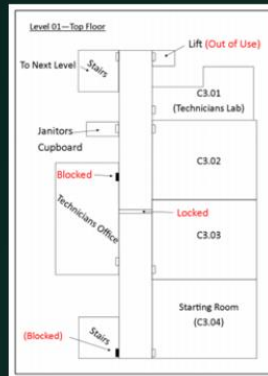
## ***Code Reviews***

- Goal: Improved code over time
- Correct Code
- Better understanding of the code

## ***Performance Budget***

- Performance limitations
- Hardware or software
- Not perfect, changes over time

## ***Level Layout***



## ***User Interface***

- Game Menus
- In-game Controls

## ***Collision Detection, Physics & Interaction***

- Collision Manager
- Collision Map Manager
- Use of Physics Engine



## ***Assets list***

- Name
- Type
- Picture



## ***Hardware and Software Requirements***

- Not all games have the same requirements
- Not all platforms can run the game



## ***Data Sharing***

- System used for data sharing
- Delivery method



## ***Version list***

- List of the predicted versions
- Description of the version



## ***Common Mistakes***

- Fails to anticipate issues
- Non-realistic goals
- Too subjective
- Superficial explanation
- Document too long
- Overlooked feedback



## *Exercise*

- In 5 minutes, find two technical risks in your project and the possible solutions



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