

## Game Creation Process

- New game ideas can come from anywhere in the company
- The decision to explore or develop a particular idea is made at the CTO level
  - Sometimes at the group lead level in the case of current title expansions

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## Team Creation

- Once a new idea for a game title has been developed, a team of people is created.
- Often involves either:
  - Taking an existing group and transferring its focus to this new task,
  - Taking some part of a group that has just completed another title.

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## Team Creation

- Producers are typically the first to be involved in the process.
  - They determine what features the game will have, and what age group it will be aimed at.
  - Usually, this involves teams of 4-6 producers with similar areas of expertise but different ideas.
- Design directors are chosen at this time too, to assemble a team of experts in the necessary areas.

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## Team Creation Process

- Since many teams are made up of teams from a recently-completed project, most of the essential positions are already filled when a new project starts.
  - Some positions become vacant due to former team members transferring to another project that is already in progress.
  - For those positions, the development director will recruit new team members from:
    - within the company,
    - other projects that do not require people in those areas,
    - people who are interested in changing projects for their own reasons.

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## Software Engineers

- **Design Director**
  - The manager who determines timelines, manages people and resources, and makes decisions on what parts need to be done when.
  - Makes monetary budget decisions.
- **Technical Director**
  - Manages the tech team.
  - Allocates technical resources, assigns programmers and developers.
  - Understands technical constraints and issues, communicates these to producers and design directors to decide on actions to take.

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## Artistic Content

- **Artist**
  - The art group provides the concept art for the various levels and characters of the game, which then undergo scrutiny and polishing from the technical director and the producer.
  - Once completed, the artist will work with the CGI team to realize these designs in graphical form.
- **Audio**
  - Audio groups are responsible for understanding what sounds are needed throughout the game, and what kind of experience they are being asked to create.
  - This group obtains or generates the sounds that will be used during the games, and works with the other teams to integrate the sounds into the general flow of the game.

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## Graphics

- **CGI**
  - The CGI team is responsible for working with graphical components of the game. This group assumes that the graphical elements of the game have already been created, and attempts to display these elements in the most efficient manner possible
- **Modeling**
  - This group works with graphics tools such as Maya or 3ds Max to create the shapes for sprites and objects.
  - These groups also adjust various characteristics of the game components, such as the lighting effects on the characters (e.g. textures, lighting, shadows, surface effects), as well as other visual cues that help enhance the scene.
- **Environments**
  - This group renders environmental aspects of a game, such as the backgrounds and levels.
  - Level designers are sometimes integrated into this group.
- **Animation**
  - Creating cutscenes and non-interactive game sequences.

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## Hardware

- **Systems**
  - This group manages the resources that the group needs in order to bring the various components of the game together.
  - The systems group will create tools that help with the assembly of the game components, identifying and reporting problems with the overall game builds.
  - This group may also perform “auto-smoke” tests that run automatically for long periods of time (e.g. overnight), to spot any bugs that can occur due to memory leaks or other conditions not related to user interaction.
  - The systems group also determines how the game will be stored on the game disk, how the installation will upload the necessary components into memory, and how the loading of various elements will take place during the game.

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## Game Design Team Roles

- **Gameplay (AI)**
  - The task of the gameplay group is very difficult, in that they are responsible for ensuring that the game plays well, and is fun. This is different from the role of the producer, who determines what the game should have at a higher level.
  - Gameplay relates to how the controls and interaction with the game provide the player with an improved experience. This often involves the AI component of the game, which ensures that the opponent behaves realistically throughout the game, and provides a reasonable challenge without overwhelming and discouraging the user.

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## Testing

- **QA**
  - Often contracted externally, the initial role of the QA team will test all the requirements of the game to ensure that they have been met.
  - The QA team will also check that the game plays as expected, and does not exhibit any strange or unexpected behaviour that is not covered by the requirements specification.

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## Technical Glue

- **Front End**
  - The front end group creates the splash screens, the introductory scenes, the menu transitions, the pause menus, and any other game interactions, outside of the regular game play.
  - This group is typically made up of newer team members who are assigned this task as an introductory stage to other game development areas.

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## Targeting the User

- **Producer**
  - The producer's role is to create the overall vision of the game, and what the game should provide that will make it stand out and draw in a customer base.
  - Once the vision of the game has been laid out as a list of well-defined requirements, the producer works with the development and technical directors to assign a price to each requirement. The requirements are then evaluated to determine which components of the game are worth retaining.
  - The producer meets often with the developers to keep them on track with the producer's vision of the game, and to make adjustments when necessary. Any high-level decisions during the development process are made by the producer.

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## Product Placement

- (Marketing)
  - The marketing group will form focus groups while the game requirements are being defined, to determine how to get the game to appeal to the target demographic.
  - After the various milestones in the development process, the marketing group brings in people to test the game and provide feedback. Recruitment for these teams begins with company employees, but will extend to external testers as the game development continues.
  - Sample sizes for these groups is typically around 1,000 people.

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## Game Design Team Roles

- The marketing person's role in the design process is not to develop code, but to provide feedback to the developers and to assess the effectiveness of the various components of the game.
- The producer is also removed from the implementation of the code in that he provides the general vision for the game, and provides feedback during the development process on whether the developers are correctly implementing this vision or not.

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