



# **Gold Belt Ninja Guide**

## **Activity 01: Overview and Planning Phase**

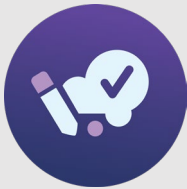
# Welcome to Gold Belt!

**Congratulations on making it to your Gold Belt**, the final belt at Code Ninjas! You have worked so hard to reach this point and you should feel incredibly proud of all that you've accomplished so far!

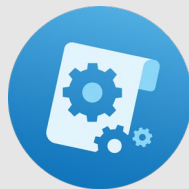
Unlike the previous belts, in Gold Belt, you will have the opportunity to create your very own project in Unity, completely from scratch. Using all of the skills and knowledge you've gained from the other belts, you will create an exciting, creative, and collaborative project from the ground up!

Check out projects that Gold Belt ninjas have already created on our Code Ninjas Gold Belt site (<http://codeninjas.com/blackbeltninjas>).

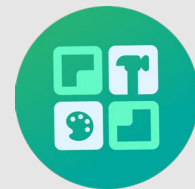
In Gold Belt, you will go through these 6 phases as you complete your final project:



**Planning:**  
Brainstorm and storyboard ideas to include in your project!



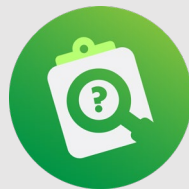
**Prototyping:**  
Create a simplified, first draft of your project!



**Development - Alpha:**  
Begin to program your project and build the bulk of it!



**Development - Beta:**  
Playtest your project and make final refinements!



**Development - Release Candidate:**  
Submit your project to get feedback from the CN Edu Team!



**Going Gold:**  
Share and present your final project!

Throughout Gold Belt, you will have lots of opportunities to plan, iterate, and test out ideas for your project. After each phase, you will record a **Dev Diary**, where you can share reflections of your experience as you make progress on your final project.

Whenever you feel stuck, try to break down each task into smaller chunks, look over some of the previous projects you've created, or ask another ninja or Code Sensei for support!

Turn the page to get started on the first phase of your Gold Belt project!



# Planning Phase

The Planning Phase of your Gold Belt project will be entirely **unplugged!** That means that you will not be using a computer for this phase. Instead, you will be planning, brainstorming, and storyboarding – all in your Gold Belt Planning Guide – as you think about all of the elements that will be incorporated into your project. Let's get started!

## In the Planning Phase, you will:

- **Brainstorm** ideas for your project.
- **Storyboard** your initial ideas by writing or drawing each scene and the different elements you plan to include.
- Begin to think about the **controls and user interface (UI)** in your project.
- Record Dev Diary #1 with a Code Sensei's help!



## Planning Phase - Brainstorming

While you may already have an idea of what project you want to create, planning and iterating on your ideas will help you develop your vision and lead to a more robust final project!

The first step of any large project is to **brainstorm**. This will involve you starting to think about and jotting down your initial ideas for your Gold Belt project. These ideas will change once you start building out your project in Unity, but it's important to start somewhere!

### Ninja Planning Document

Complete the **Planning Phase - Brainstorming** portion of your Gold Belt Ninja Planning Document to think through initial ideas for your project.



## Planning Phase - Storyboarding

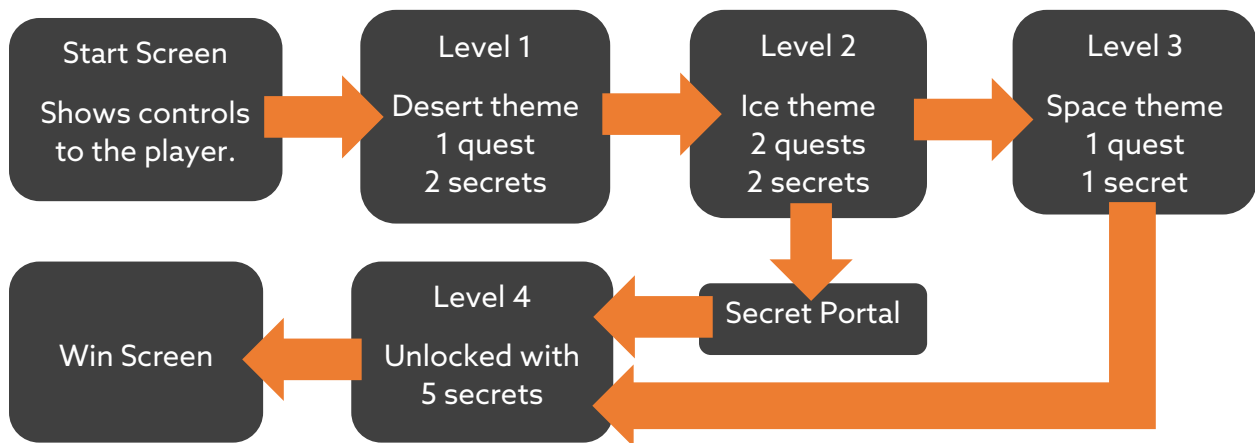
Now that you have thought through the basics of your project, you can start focusing on the details. It is important to have a clear vision for your characters, environment, and story before you start coding, and you can do that with a **storyboard**!

A **storyboard** is a sequence of images and text that act as a visual timeline for what will happen in your project. It should map out your ideas for how a user will progress from start to finish in your project, showing the decisions, obstacles, and goals they will encounter along the way.

A storyboard will help you think through different scenarios, such as:

- What happens at the beginning, middle, and end of the project?
- What different scenes will you need to include in the project?
- What does the user need to do to achieve their goal? What happens when they do or do not achieve it?

Your storyboard might look like this:



### Ninja Planning Document

Complete the **Planning Phase - Storyboarding** portion of your Gold Belt Ninja Planning Document by writing or sketching the characters, setting, and story of your project.



## Planning Phase – Controls and User Interface

Think of different games and projects you've played and created. What type of screen appeared at the start? What information was available to you while playing? These components are all part of the **user interface**, or **UI**.

As you build out your own project, consider what information might be presented to the user at the beginning, middle, and end of the project. Since your UI should be visible without distracting the user from the project, designers often place UI elements around the edges of the screen. Consider the following questions:

- Can the user earn or lose lives or points during the project? Where and how will these be displayed?
- Are there collectables or an inventory that your user needs to keep up with?
- What other information does the user need to know as they interact with your project?

It's also important to plan the **controls**, or how the user will interact with your project. Consider the following questions:

- How will the user move a character around the screen?
- Will the user be able to use letter keys, direction buttons, their mouse, or a combination of these?
- What else will the user be able to control while navigating the project?

### Ninja Planning Document

Complete the **Planning Phase – Controls and User Interface** portion of your Gold Belt Ninja Planning Document by sketching the controls, the start screen, and user interface of your project.



## Finishing the Planning Phase

As you wrap up the Planning Phase of your project, work with a Code Sensei to record a Dev Diary video, then review this checklist to demonstrate that you are ready to move on to the next phase of your Gold Belt project!

### Dev Diary #1 - Planning

Work with a Code Sensei to record a video in which you:

- Introduce yourself: Tell how old you are, how long you have been at Code Ninjas, and your 3 favorite things about being a ninja.
- Describe the project that you plan to create and something that you're excited about.
- Explain any challenges you anticipate in the prototyping phase, and how you plan to overcome them.

### Planning Phase Checklist

- ✓ My Gold Belt Ninja Planning Documents (Brainstorming, Storyboarding, and Controls and User Interface) are complete.
- ✓ My project's theme and story have been developed and are appropriate for a Gold Belt project.
- ✓ My project's scope is manageable.
- ✓ I recorded Dev Diary #1 with my Code Sensei.