

GITCG Universal Protocol V1.0

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1 Introduction

GITCG Universal Protocol, also known as *GIUP*, is a descriptive definition of game Genius Invokation TCG¹. GIUP is committed to creating a universal, transferable definition of situations and actions for GITCG. GIUP isn't a rulebook for GITCG - it's not trying to be the boss here. Instead, GIUP's goal is to describe the current state of play in GITCG and the potential action space, without getting tangled up in how different elements interact. So, we claim it *descriptive*.

2 Terminology

This section will introduce the key terms in GITCG and provide precise definitions.

Term 1: Player

GIUP uses a number starting from zero to represent players. In the basic version, there are only two options: 0 or 1. In the extended version, there will be other options, such as a random player (2).

Term 2: Current Player

Current Player represents the one who can take an action at now.

Term 3: Round

It is exactly same as Round in the game.

Term 4: Turn

When current player changes from 0 to 1 or 1 to 0, Turn +1. At the beginning of each Round, Turn is set to 1.

This definition already takes special cases into account.

Term 5: Element

Elements are:

0. Omni (also Empty for aura)
1. Pyro

2. Hydro
3. Electro
4. Cryo
5. Dendro
6. Anemo
7. Geo

Term 6: Damage Type

Damage Types not only include **Element** (Term 5), but also two additional options: piercing and physical. Omni damage has no practical meaning here.

Term 7: Energy

Energy is a number.

Term 8: Dice

Dice, is a two-element tuple: (**Element** (Term 5) or Black or White, Number)

We use term **Elemental Dice** to refer dice with concrete **Element** (Term 5).

Term 9: Skill

A skill consists of

1. Skill Name. An identifier(string or int).
2. **Damage Type** (Term 6).
3. **Energy** (Term 7).
4. A list of required **Dice** (Term 8).

¹https://en.wikipedia.org/wiki/Genius_Invokation_TCG

Glossary