# Catch the Mammoth (технічний документ)

# Список Класів

1. **Map**: Map’s options and general characteristics of Cages.

* *Contains size of the map, array of cages, their size and start location.*
* **Cages (array [,]):** An array of Cages.
* **CageByVector**: Get the Cage by the current vector.
* **CanSetTile**: Check does it possible to set Tile in current Cage.
* **SetTile**: Sets tile in the current Cage.
* **Setup**: Set the size of the Map, size and start position of Cages, create an array of Cages.

1. **Level**: Base class for levels that has records of level to configure Map, Tiles, and environment.

* *Includes a record about an array of Cages, start position of Cages of Map and their size.*
* **SetupMap:** Setup Map’s size and options about each Cage.
* **SetupEnvironment:** Setup the void around Map.
* **SetupTiles:** Setup all tiles and translate them.

1. **Cage**: Base class for all Cages that includes basic info.

* *Includes info about does Cage is free.*
* **Setup**: an abstract method to setup any Cage.

1. **FreeCage:** A cage that free at the start of the game and can be used to set Tile on it. (extends Cage)

* *Includes an info about presence of Tile on it and about that Tile if it exists.*
* **Setup:** setup a free Cage’s image.

1. **OccupiedCage**:A Cage that occupied at the start of the game and player can’t interact with it. (extends Cage)

* **Setup:** Setup an occupied Cage’s image depends on the type of image in the CagesRecord.

1. **CagesRecord**: A record about Cage, not a real object. Using in Level class to setup Map and create real Cages.

* *Contains info about content of real Cage: does it full and if isn’t full what type of obstacle is in it.*
* **CreateCage**: Create a Cage by the record’s semblance.
* **Enum ObstacleType**: indicator for sprite in the OccupiedCage.

1. **DragableTile:** A Tile player sets to the Map during the game.

* *Contains an info about Cages that Tile cover, about location of the caveman on it. Also has an info about location on the Map and on Tile zone.*
* **Set**: Make Tile state set.
* **Unset**: Make Tile state as free, return it to Tile zone and make Cages free again.

1. **TileFactory**: Create a Tile and set it into Tile zone.

* **CreateTile**: Create a Tile.