



# money quest

Game Manual

Version 1.1



Co-funded by the  
Erasmus+ Programme  
of the European Union

## **MoneyQuest** A Game for Financial Education of Children

*PROJ. Nº 2016-1-TR01-KA201-033837 | © 2017 all rights reserved*

**Title:** Game Manual

**Project Activity:** O1.A2. Game Specification

**Date:** Feb 2018

**Version:** 1.1

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# Introduction

The project aims to create an **Online Learning Computer Game** that may be used in formal, non-formal and informal education settings, **providing a simulated environment** in which users (**children 6-10 yo**) are presented with **key financial concepts** and are required to **make decisions regarding the use of money**, in order to:

- Prepare them to deal with money in a responsible manner and direct them towards the responsible use of money in the future;
- Strengthen their behaviours leading to increased saving, more productive and responsible spending, and borrowing for sound reasons.

Game Concept



In the Game, the Player is an inhabitant of a distant Planet and embodies the role of a **High Official** trusted with a task of setting up and launching a Space Mission to Earth.

The game objective is to launch the Space Mission by attaining an adequate level of **Mission Points (MP)** while maintaining a good level of **Financial Stability (FS)**, by making smart decisions regarding spending, savings and investments.

The Player **begins** by identifying the needs of the Space Mission and by setting up a budget for this purpose.

In a **second stage**, the Player will have to prepare the Space Mission, by gathering the needed resources and meeting other requirements. The Player starts with a an amount of coins (the currency in the game) and will additionally get a monthly allowance to get resources, pay for training, make decision on savings, loans, insurance services, current spending, etc., ...all of this with impact on the level of **MP** and on the level of **FS**.

Most spending and purchases contribute to higher levels of **MP**, but endanger **FS**, like commissioning the spacecraft chassis, for instance. Others, a paint job on the spacecraft have no impact in the **MP** while representing a negative impact on **FS**, thus representing superfluous spending. Even other expenses, like repairing damaged spacecraft parts, have a negative impact on both **MP** and **FS**, as they imply extra spending just to reset (put back) to a previous situation.

At this stage also some random events will occur with impact on **MP** and **FS**, testing the Player's options, like a broken spaceship part in need of repair.

**Finally** the Player will have to launch the spacecraft to complete the Mission.

## Game Goal

The game's objective is to successfully launch a Space Mission while maintaining a balanced financial status, using the minimum of time possible (**turns or months**).

## Game Objective

The game's objective is to attain an increasingly higher level of **Mission Points (MP)** while maintaining a good level of **Financial Stability (FS)** by making smart decisions regarding spending, savings and investments, to finally **repay any debt** and launch the Space Mission.



# Game Elements & Mechanics

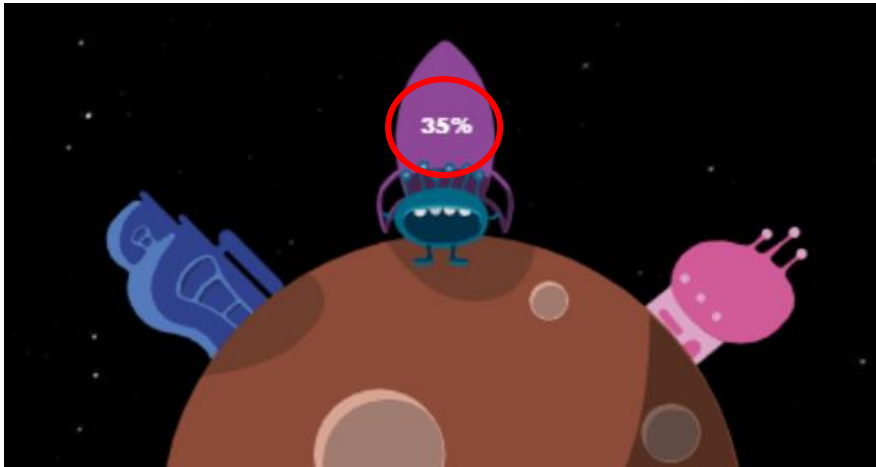


## Players

The game can be played by a single player, controlling the main character of the game, or by a group of players taking decisions together for the main character.

In class, the game can be played individually or in group, as thought more convenient depending on physical conditions in the classroom and type of class dynamics the teacher may want to promote. The same goes for informal and non-formal learning environments.

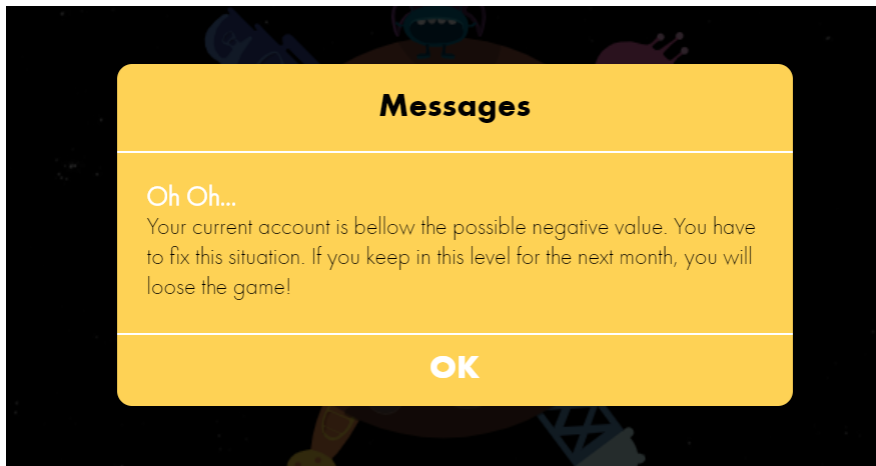
## Mission Points (MP)



MP is a **measure of success in the game**. The Player will accumulate MP points from different game dimensions: Spacecraft, Crew, Training, Mission Control Facilities, Equipment, Tools & Supplies.

For the player, the MP will show as a percentage in the main screen, meaning that the higher the percentage the closer the player his of successfully accomplish the mission.

## Financial Stability (FS)



FS is the other **measure of success in the game** that adds to MP. FS is calculate for each month (turn) as the **debt-to-income ratio**, i.e, FS expresses how much the debt monthly obligations weights on the monthly income. Another way to see is that FS tries to measure the capability to meet future financial obligations that result from debt.

FS is **not represented on screen** at all times. Instead, the player will be given alerts whenever he/she is falling into over-indeptness. This indicator will also be used to calculate the amount of Coins the bank is available to loan the player at any given time.

## Coins



Coins is the currency in the game. The Player can use them to buy the goods and services, and to contract the financial services that he/she needs to go through the game stages and launch the Space Mission.

The player gets an initial grant in Levels 2, 3 and 4 and a monthly allowance of Coins for setting up the Space Mission, but he/she can also draw income from interest on bank deposits.

The Coins the Player earns are visible in the main menu and inside each building.

## Turns



Turn is what enables the game action to move forward. The Turn starts always in the Headquarters (see ahead).

Each turn represents a month in which the Player can visit freely the different areas of the game that are available. The Player will have to hit the End Turn button to go the next month.

## Achievements

Achievements translate upgrades to the Mission's preparedness status. These achievements are related to the spacecraft, training, headquarters, etc.,.

The Player can also lose achievements with drawbacks such as having to downgrade to a smaller headquarters.

Along his/her journey in the game, the Player has to collect these achievements in order to progress through levels and launch the Space Mission. Different game levels give access to different achievements.

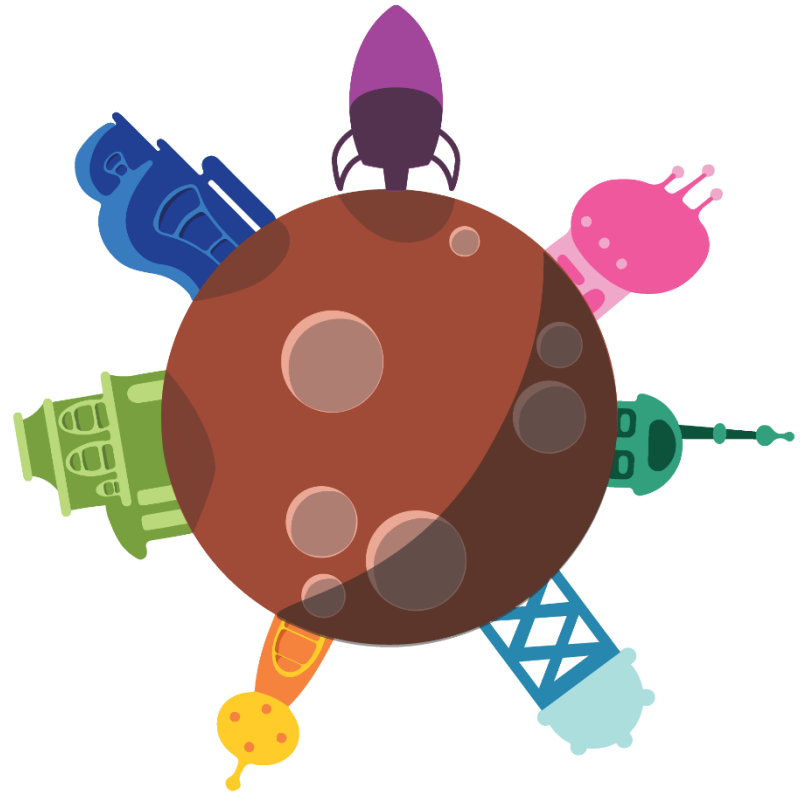
# Achievements

Level	Spacecraft	Crew	Headquarters	Training	Eq., Tools&Supplies
1	-	-	-	-	-
2	a. Chassis design	a. Pilot	a. Basement	0. Complementary training	a. Space suits
	b. Engine design	b. Engineer	b. Basic room	a. Basic training I	b. Communication devices
	c. Software design	c. Scientist	c. Office	b. Basic training II	-
	d. Chassis construction	d. Medical staff	d. Technical room	c. Navigation Training	-
3	e. Engine production	-	e. Control Room	d. Equipment maintenance training	c. Medical equipment & tools
	f. Software development	-	f. Command Center	e. Equipment operation training	d. Repairing equipment & tools
	g. Awesome chassis	-		-	e. Scientific equipment & tools
	h. Assembly	-		-	-
4	i. Systems test	-		f. Simulation training I	f. Medical supplies
	j. Stress test	-		g. Simulation training II	g. Repairing parts
	k. Cool paint job	-	-	-	h. Food
	a. Chassis design	-	-	-	-
5	-	-	-	-	-



## Moving around the Planet

The players will click the destination building to move. He/she can visit without limitation all the building in each turn.



## Levels

There will be **5 Levels**. The first level enables the “on boarding” of the players. They can get familiar with the game mechanics and graphic elements. The next levels are **increasingly more difficult**, with a **higher number of decisions/options** available to the players.



## Loosing

The Player will loose the game in particular circumstances:

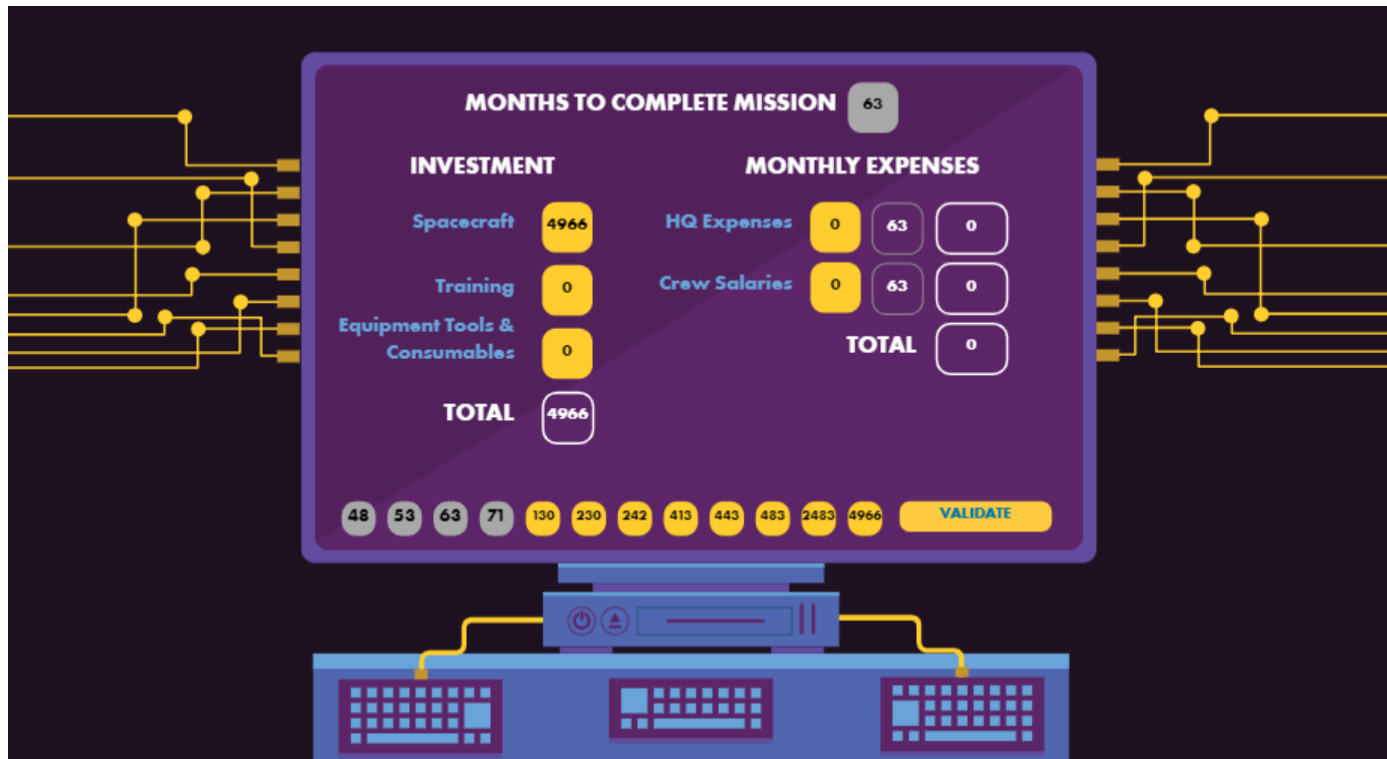
- Does not have a HQ by the end of the month (turn)
- Does not have means to meet obligations that are due resulting from debt (e.g. repay loan on time).
- Fails to have a successful launching of the spacecraft

GAME  
OVER

# Level 1. Planning

**Level 1** is about planning. The Player has to learn what the Space Missions needs are – e.g. spacecraft, crew, etc. – to estimate the cost by visiting the different buildings on the Planet for information and finally to create a budget for the Mission.

The Player must make the correct budget estimation to progress to the next level.



# Level 2. Getting Started – Level 4. Final Arrangements

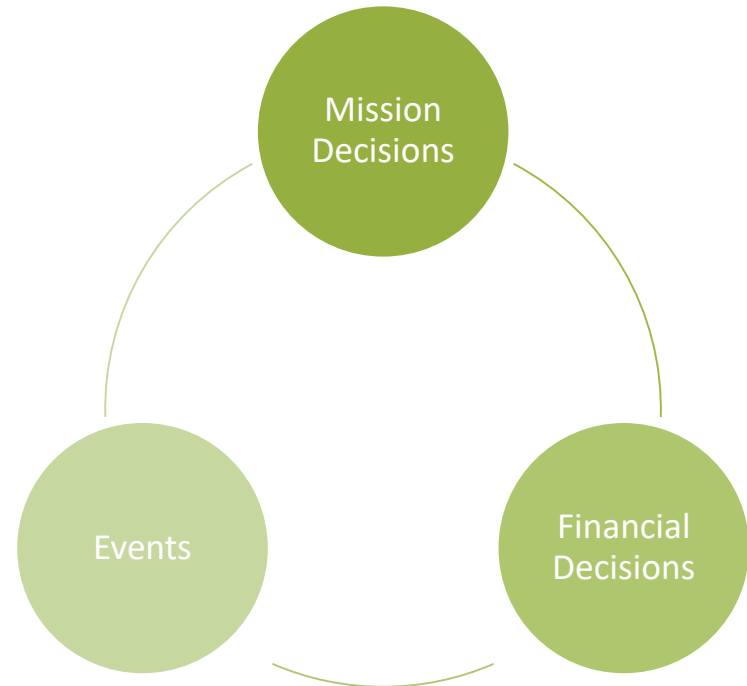
The **Levels 2 to 4** are all about preparing the Mission according to the planning – building the spacecrafts, getting the crew ready, etc..

The Player has to progressively achieve higher levels of **MP** while keeping an adequate level of **FS** that reflect an increased ability to manage finances and to deal with **increasingly more complex** financial challenges.

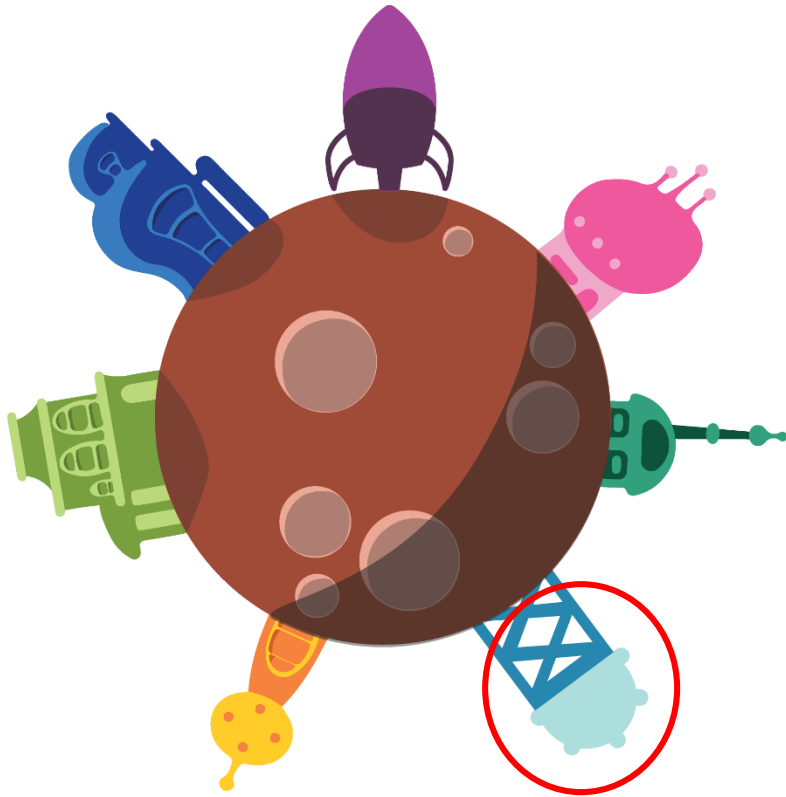
## Decisions & Events

In his/her journey, the Player will have to buy (eventually sell) items, pay for services and pay for current expenses (rent and salaries). The player can be affected by random events that will challenge his/her financial management skills.

Thus, the Player will have to make Mission and Financial Decisions and will be subject to random events that influence the play.

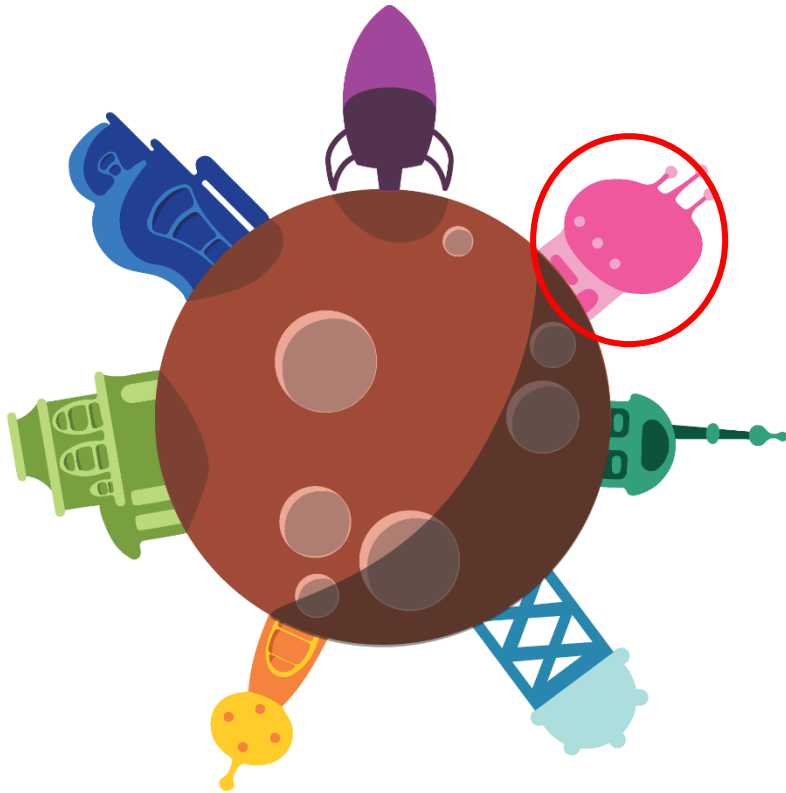






## Spacecraft

The spacecraft must be built by the Player in the **Production Facilities**. Some of the features that are available, though they offer an aesthetic value, they are not required for the Mission, thus they do not make the Player earn MP. This enables the Player to understand the difference between “needing” and “wanting”. The game graphics should reflect the aesthetics improvement if implemented by the Player. Each production phase takes a certain amount of time (in turns).

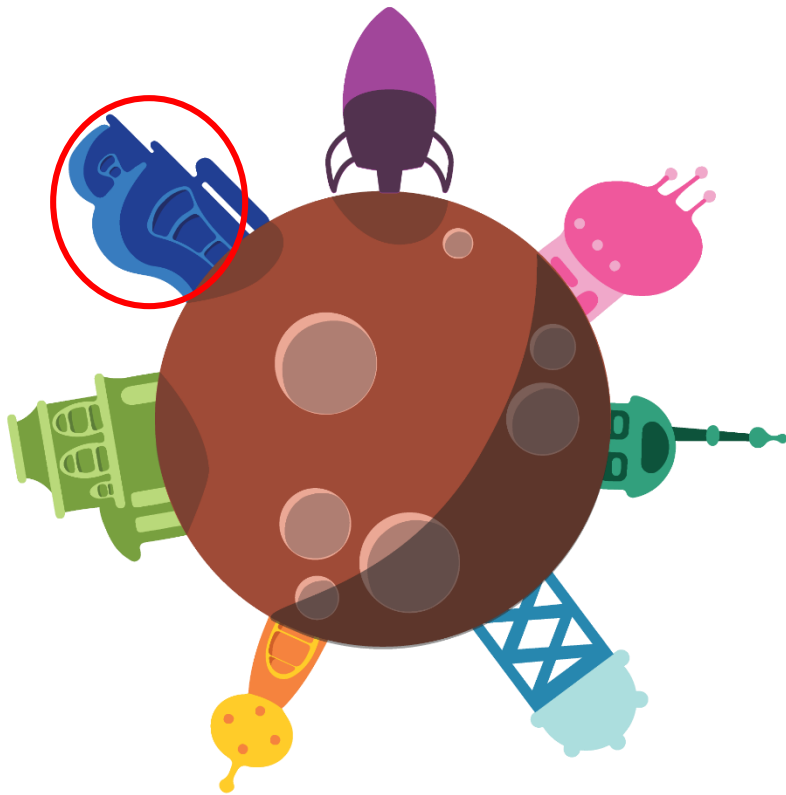


## Crew

The Space Missions needs a crew. The Player has to recruit this crew from the **Talent Center**. Each crew member available for hire has a particular cost (monthly salary) and a particular level of MP associated with him/her.

The Player needs to have a complete crew to progress from Level 2 to Level 3, but every month new applicants can show up in the Talent Center and the Player may perform replacements. For instance, the Player can sack a Scientist to hire another that has a lower salary and/or a higher level of MP.

The MP of the crew can be improved by **specific training** in the **Training Center**.

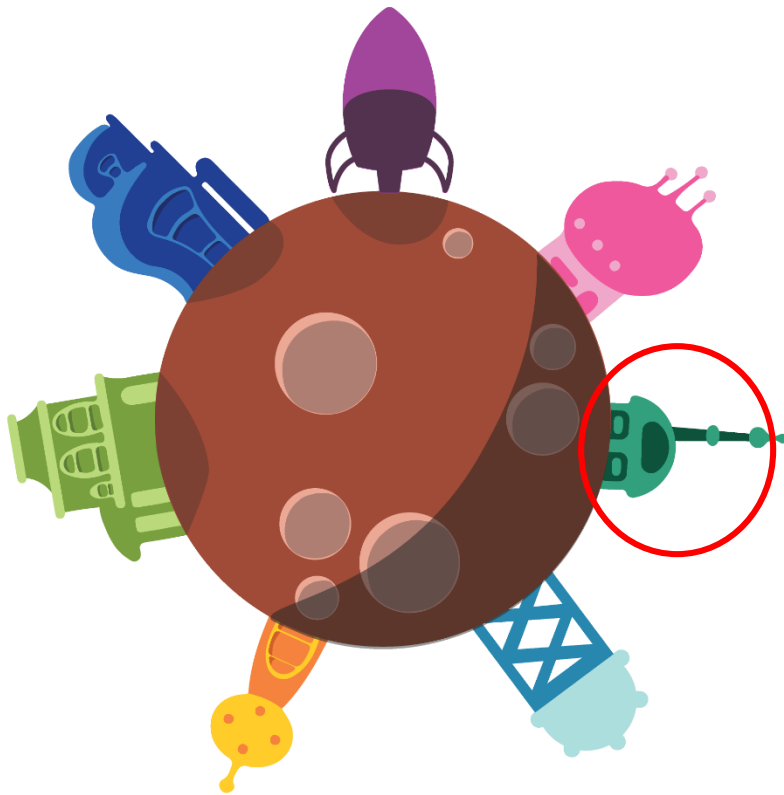


## Headquarters (HQ)

To rent a HQ is obligatory. The Player cannot remain a month without a place to from where to prepare the Mission. If a month goes by and the Player did not make the necessary decisions to have a HQ he/she will lose. A Player can only have one HQ at any given time, thus renting a place means ending the rental on the current HQ.

Each option for the HQ has an impact on the game points (Coins, MP and FS) in 3 ways: When the Player pays rent, ends rental and when each month pays for utilities: electricity, heating, water.

To rent a HQ, the Player has to go to the Headquarters area.

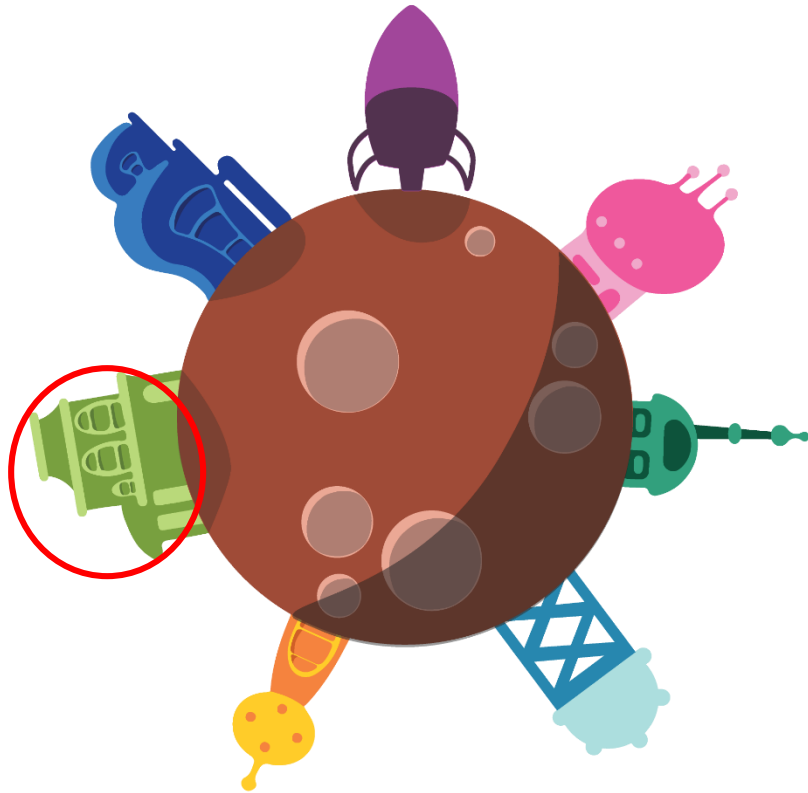


## Training

Training is essential for the Space Mission success. The Player has to purchase training packages in each game level.

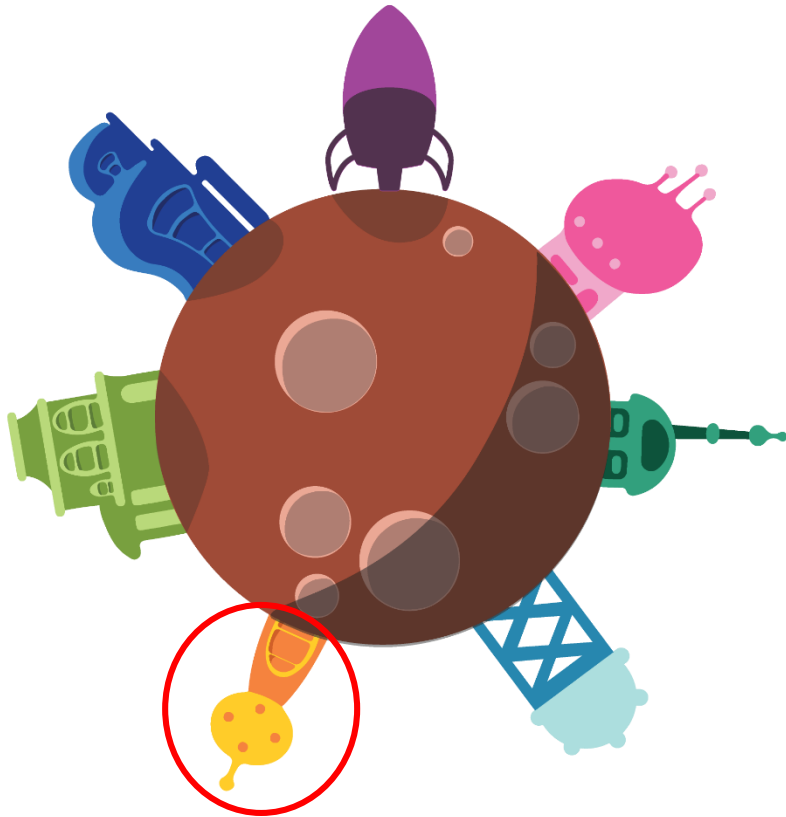
Each training gives a certain amount of MP points that accumulate. Each training also takes a certain amount of time (Duration in Turns) to be completed.

The Player also has the option to provide complementary training to overcome low MP level of crew members till the maximum of 200 MP for the total of the crew (see Crew).



## Equipment, Tools & Supplies

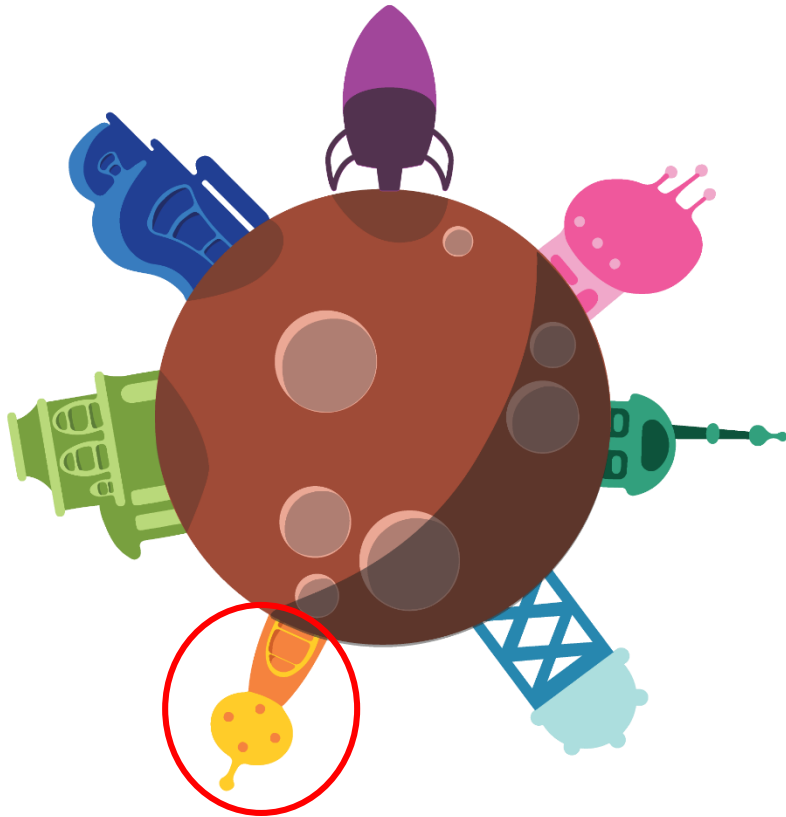
The Player has to equip for the Missions. Thus he/she must go to the Market to buy required equipment, tools and supplies. Sometimes second-hand options show at the market. They are less expensive but they can cause flaws influencing the MP points.



## Deposits

The Player can make bank deposits. This financial products is available in the Bank.

The **interest rates are expressed as monthly net rates, i.e., liquid of commissions and tax.**

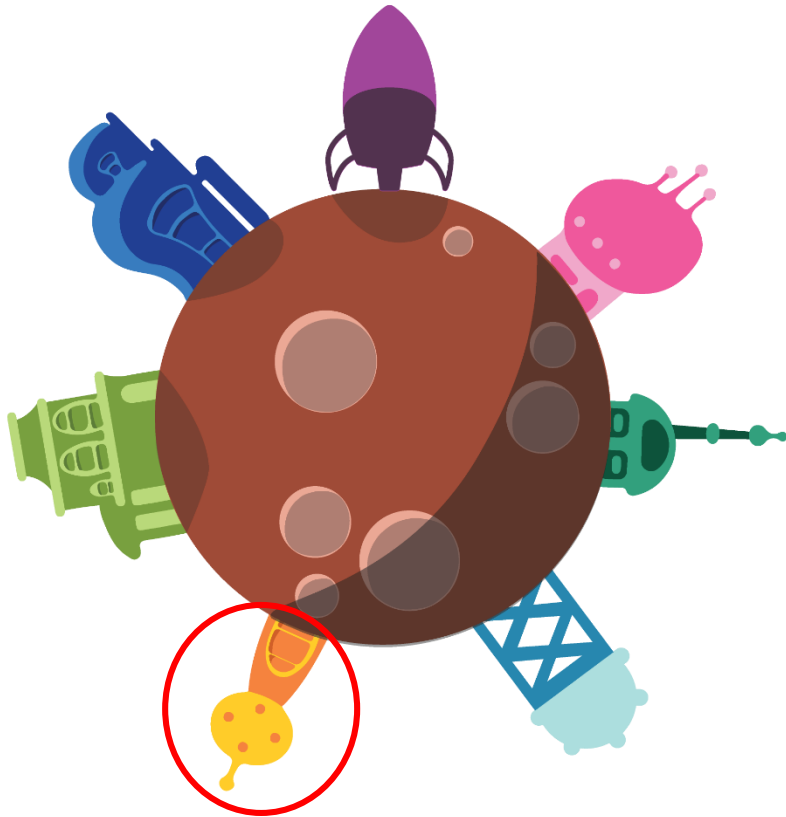


## Loans

The Player can get a loan for more Coins. For that purpose he/she has to go to the Bank. The interest rates are expressed as the total cost of money and will be charged monthly.

There are maximum amounts for the money the Player can get from the Bank in relation to his/her monthly allowance.

The interest rates are expressed as monthly net rates, i.e., liquid of commissions and tax for simplification reasons.



## Insurances

The Player can get Insurances from the Bank. He/she can get an overall insurance.

Insurances are voluntary, but not having the insurance puts the player in greater risk of having to spend Coins in repairs resulting from accidents, etc.



## Events

Starting on **Level 2**, there are other events that can occur in the game for the Player's benefit or disfavour. Some of these events include:

- Work accident involving the Crew
- Fire in the HQ home, resulting in serious damage
- Bonus payment for outstanding performance in the job
- Etc.

These events will allow to test the Player's management skills and the use made of insurances, etc.



# Level 5

## Level 5. Launching

**Level 5** is about launching the Mission. The Player will have to gather the amount of Coins required for the launching and repay all debt (if existing).



THE END



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