

Academagia

Game description

Academagia is a type of text role games. Player gets an opportunity to be in the shoes of junior wizard. He will have 280 days to follow the path of a wizard: from a newcomer to a real wizard! Staying in the Academy the player is able to choose the way of his development. Has somebody offended you? Challenge him to a duel! Do you want to get support of friends? Organize a clique. Do you want to learn something new and mysterious? Explore the college and its surroundings. Do you want to defend the honor of the college? Develop yourself and become worthy of a company playing Rimbal. The catching plotline, interesting stories and bright description of characters are presented in Academagia.

There are several colleges in the game. Each college has its own style, unique abilities and specializes in a certain magic. Colleges have several classes of training. Most time students spend attending classes. When they finish the class they sit for an examination. If they pass it they improve their skills. No one forbids you staying away from the classes. In this case you may get punishment in the form of Evening or Sunday classes or you even may be sent down.

Every character, including the player, may be defined by Attributes, Skills and Abilities. A character also has Items and trained Skills in his disposal. Fulfilling concrete requirements, the player gain new knowledge and improve characteristic and skills that he possesses. Apart from his own abilities, a character may use skills that he got from the college, class and clique. When a character leaves the clique, he loses its Skills.

Every student may have a Familiar, which can be helpful thanks to his Skills. In a case the Familiar gets itself into a mess, the Player will have to get out of it staying in the body of Familiar.

Surroundings hide a lot of interesting and mysterious. The player is free to choose any area of exploration and find himself at a location. Here he may meet a Monster standing guard over entrance and try to win him in a Fight. The path may be obstructed with Thresholds and only a key can help to go further. Having surmounted obstacles the player may get involved into interesting story, which will help to get new knowledge and necessary Skills and Abilities. Explored areas are also useful for their unique possibilities. Sometimes it is impossible to be succeeded in carrying out an action without these possibilities, for example, when you create new items.

The player may create new items, besides those that are already existed and can be found at different locations. He will need to meet only some conditions to do it, for example, possession of certain ability and of a necessary set of ingredients. Not only you create items but also select them, steal, get as a present, buy from merchants in the shops or order in catalogues.

Some items may be improved. When improving items may get magic attributes (new characteristics).

Not all the items can be everlasting. Some items may wear out after several times of usage, other items reduce to dust in the course of time.

Undoubtedly the main stem of the game is the plotline. The plotline is built on a story mechanism. Stories appear as a result of some events or in case of coming date. Passing through different adventures the player makes a choice. The choice leads to certain consequences and plot development. Refusing to help somebody, the player prevents himself from the support of a character who possesses necessary Abilities. Insulting him the player gets a foe.

If the player makes foes during the game, the enmity may lead to a Duel. Duel is a ritual which obliges them with observance of concrete rules. The player may stay away from the Duel for different reasons, but this may end up with derision and falling off in relations with others.

There is a game Rimbal for those who don't want to measure swords in a battlefield. 2 teams from 2 colleges struggle for a ball according to game rules. The game is divided into rounds. Teams are Forwards or Defenders by turns. They get scores for achieving goals. The winner is a team which gets the highest score.

The action should be planned for the next day to be carried out. When the player decides what he is going to do and confirms his choice he starts a new day. He may indicate up to 3 actions, which correspond with 3 phases: Morning, Day and Evening. The game processes all actions of all the characters step by step and by phase. Not every planned action may finish successfully. The success depends on many factors: characteristics of the character, characteristics of the target-character and even on the weather!

Information plays an important role. To have an opportunity to use Skills or an Item, you should get the information. Without the information a unique magic Item is no more than useless toy.

When the player finishes the class he is presented awards for his achievements at the Final ceremony.

The game may be played many times. Each time it will appear in a new light. New sequence of events, new advantages – all these depends on your choice and acts of the characters which live, develop and pursue their goals.

GAME MECHANICS

Game mechanics is built on modification of the world by means of Effects. There are about 50 Effects such as Add, Expand, Increase, Transfer, Explore, which allow to describe various actions of the outside game world. All abilities, Actions and Spells are made up of Effects. Using Ability, Action and Spells a character can impact on the game world.

Every Effect is defined with several parameters such as Subject, Object, Target. Interpretation of these parameters depends of the Effect type. In addition to these parameters, additional section has an impact on the work of the Effect. Additional section allows adjourning task accomplishment to the desired event coming. With the help of this mechanics you can implement shield. Useful act of the shield happens only when there is a negative impact on an object.

All game cycle is divided into 6 phases. For the first three phases the player is free for determine actions which are necessary for him. The rest three phrases are used for planning future actions. At the same time artificial intelligence plans its actions.

Artificial intelligence bases its choice on tables which are determinant in the characters behavior. Artificial intelligence corrects the table during the game trying to choose the most successful one. Acts that are successfully finished get a higher chance for repeated choice. But for all that it tries other acts which were less successful in the past. This is done for mistakes imitation and for other strategy search.

Constant or variate are used for determination of act success. The borders of their value are set by the attribute or character's skills. Then the set value is compared with threshold valuation which has been calculated in the same way. Thresholds' increase is a necessary condition for the task accomplishment.

There are effects which influence on modified effects, besides effects which modify the game world directly. Some of them allow to change algorithm of calculation, other influence on effect parameters, replacing their primary value.

Every effect has its length of time. Some effects may have their impact for unlimited period of time. It depends on the special parameter which is set for the effect. Time of the effect existence may be set not only with this parameter but also with other conditions, for example, the character presence in the concrete area or clothiers which he wears. Thus the effect may be set in such a way that when the ring is on the character's finger his strength increases and vice versa.

The game uses several time flows, which may exist parallel or occur one after another. The second variant makes parent time flow stop and child start. When child flow finishes, parent flow recommences. At the beginning of the game main time flow starts. This time flow is used for all the creatures related to this time or created during this time period. At special cases child time flow may be created. It helps to limit time of effect implementation in the boards of such actions as Duel, Fight or Rimbale. Effects which are used in a fight lose its power after it. One more reason of time flow use is the difference in measurement

systems. At the one time flow phase is used as a unit time and for example Round and order are used as a time measuring instrument at Rimbal.

TECHNICAL INFORMATION

Mod Tool

Game per se is an interpreter of game content. Special implement which has been developed for its creation helps easily and quickly prepare all the necessary data. With it help working process may be divided between the groups of creators.

New main base is created for game content preparation. This base is used for creating bases which contains changes. Base of changes may be merged to get a union base. Base of changes may be transformed to get the main base.

Using bases of changes among project members you may achieve team development. If needed you may merge the material, which has been worked by the all members and use combined data in the further work.

Nhibernate is used for work with data and Firebird Embedded is used for data saving. This merge is extremely good when you need to download a huge data level. Though when it is needed to download a huge data level in a minimum time the result may turn out to be not that good. Hence for the game the content goes through process of transformation and is saved in binary format. For data saving modified algorithm of data serialization is used. The algorithm helps to decrease file's size and minimize time of download and data saving in dozens of times. At the same time when there is a file transformation, huge recourses in the form of single file are extracted. This is done as required.

Technologies and components used:

C# language

.Net Framework 2.0

Firebird Embedded

NHibernate

ACADEMAGIA

As it has been mentioned the game is an interpreter of game content. There is an official content distributed with the game. And it is a starting point for the following additions. This mechanism is accessible for enthusiasts who desire to change or add something. At the beginning of the game the player chooses modes which he want to use. Then during the process of merging chosen modes with official content, modification of the content and data preparation for action are done. At this process the algorithm of merging and serialization is the same as in a ModTool.

For UI development Windows Presentation Framework (WPF) and Visual Studio 2008 have been used.

For music and sounds reproduction the OpenAL library is used. All the data is saved in Ogg Vorbis format.

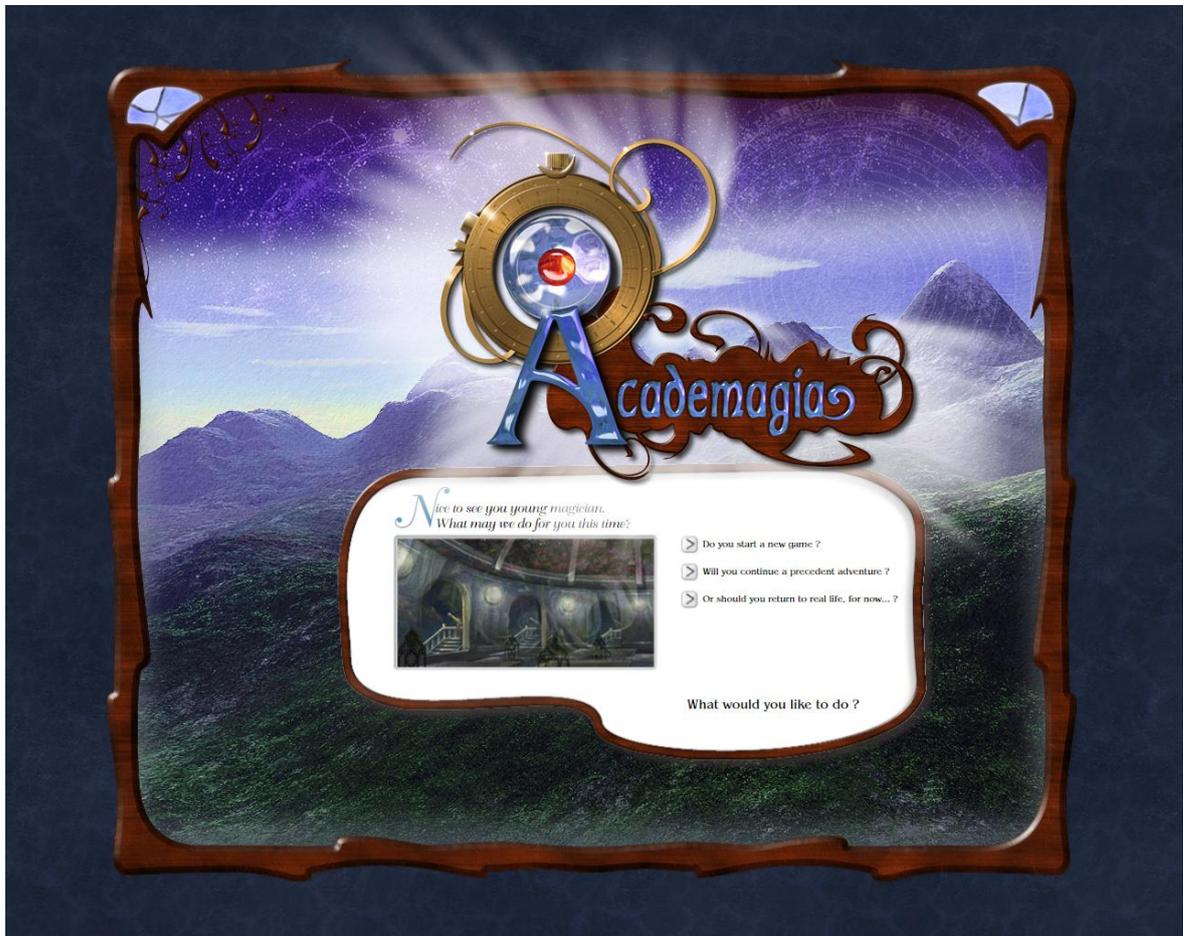
Technologies and components used:

C# language

.Net framework 3.5

Open AL

Appendix A



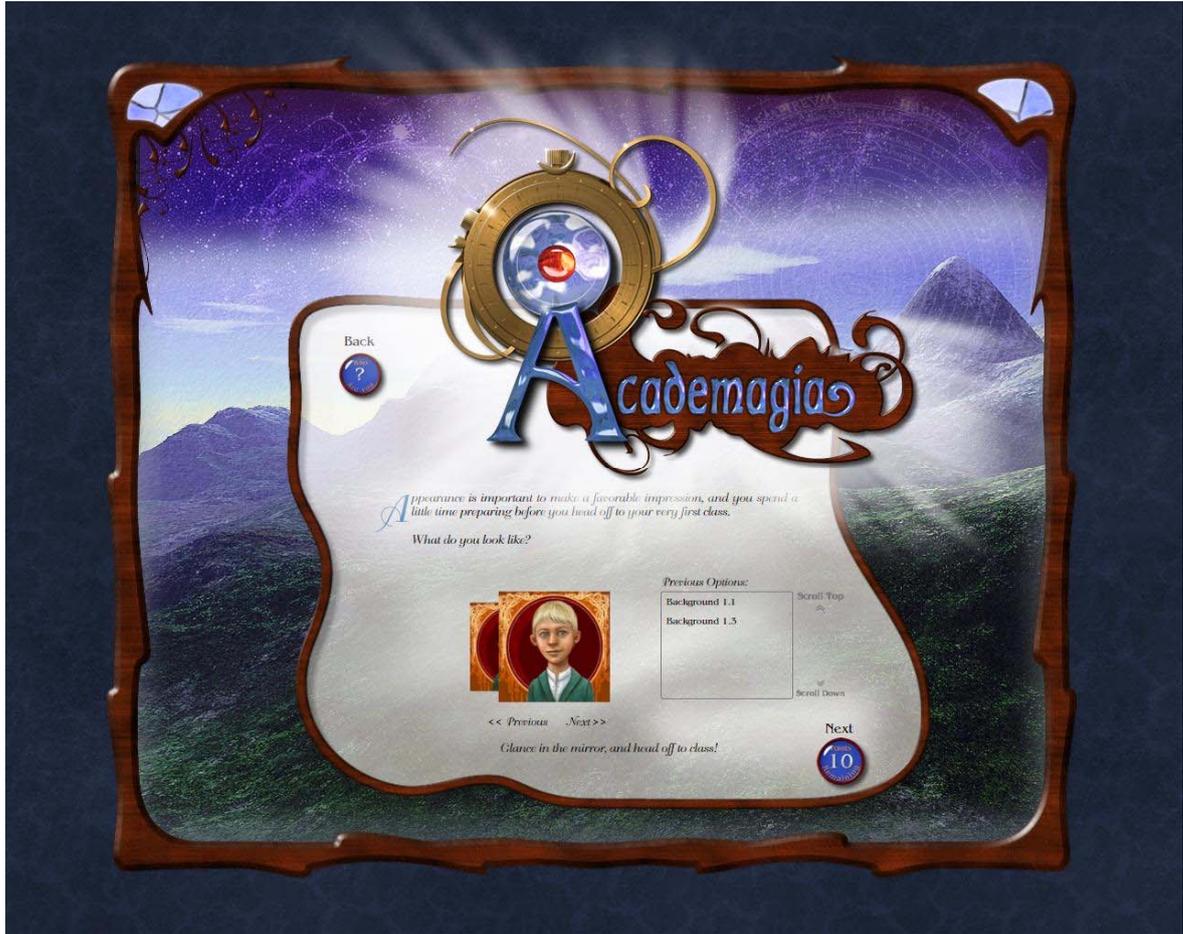
First screen. Greeting and main menu. There you may download previous saved game or start a new one.



One of the screens of character creation. Marked points are divided on attributes.



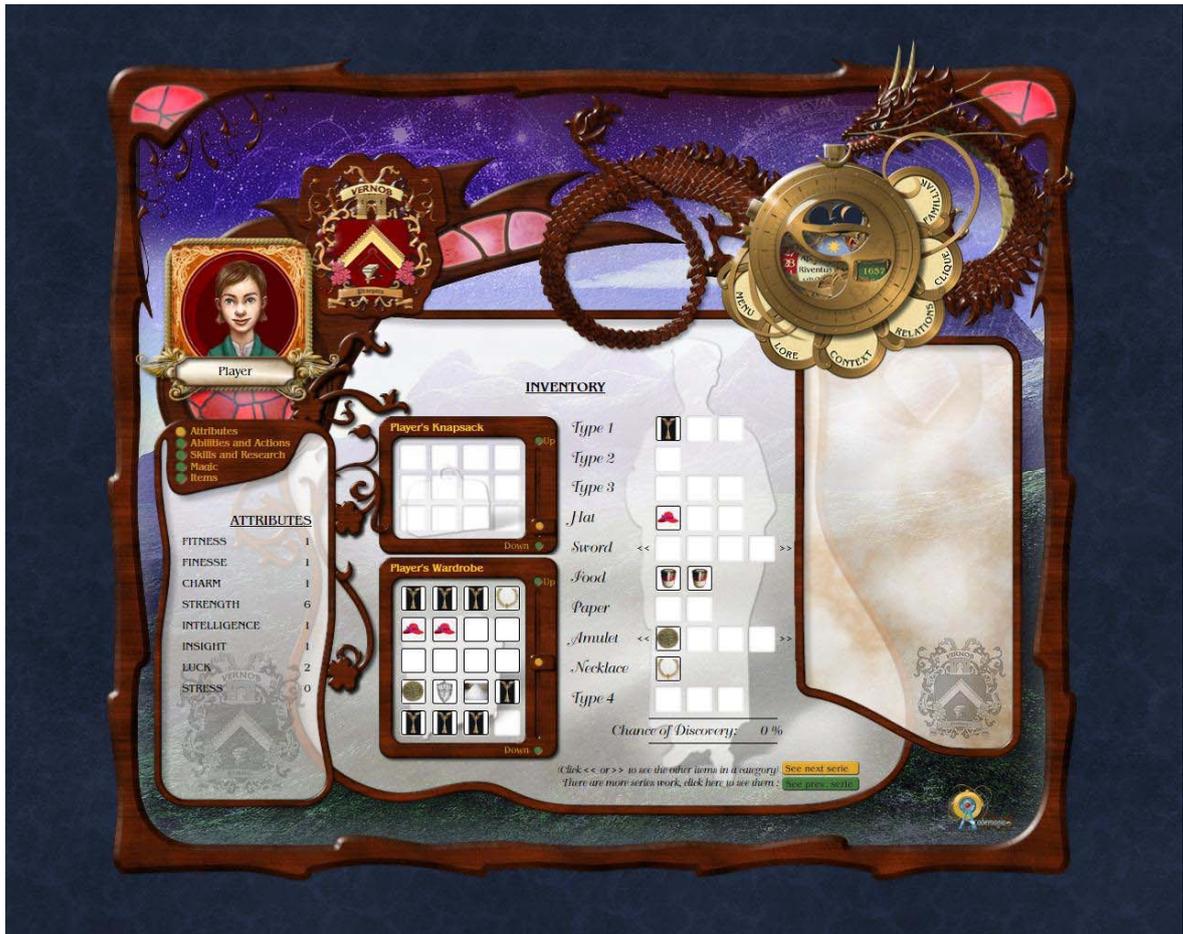
One of the screens of character creation. It helps to define traits of the created character: background, education and etc.



The last screen. It allows choosing the portrait of the character and starting a game. When the scrolling button (or the other portrait) is pressed, the current portrait disappears and the selected portrait appears.



The main screen for actions planning. There the player chooses actions for the following days. As it is seen on the screenshot Action, Cast Spell, Use Item and Use Ability can be chosen for every phase. Description of every item in the right menu is presented in the upper panel.



Screen Inventory. The player may be occupied with the items which he carries or which are contained in his private room. There he can dress in different clothiers. When the item is moving, the cell illuminates showing what cell the item can be put in. If the item is overweight or the character can't be clothed in, the sell will have a red colour.



Screen of ordering items through the catalogue. The player makes an order and after some time he gets the Item in his disposal.



The screen of buying from merchants in the shops. On the right there are items which merchant sells, on the left there are items which the character possesses.



Screen of a new Item creation. 3 panels are used for selection of the created Item and necessary ingredients. The last panel informs the player of the process flow.



This screen allows improving the Item, adding it new features.



Duel screen. At the central part you can see a foe, his actions and his Familiar. Pressing button 'End melee round' calculation of the selected actions is realizing.



Feedback screen. The screen presents the information about all actions which took place during the day.



Story Screen. The story is told here. The player is suggested set of actions. In some cases, for example for successful accomplishment of the action, the player may sacrifice anyone from his team.



Screen of Rimbäl Game. On the opening sides of the board you may see 2 teams and their statistics. Actions are choosing here. On the central part you can see the game situation: current round, scores, ball position and ball state.