Additional part of LAB1.

The intent of writing this review is to make a kind of introduction to existing tools, methods of creating a design, an architecture of various applications.

Well, during first lab I have basically used two engines for modelling. They are: **draw.io, Enterprise Architect**.

So let’s try to highlight the main advantages and disadvantages of these applications.   
I will consider them according to my frequency of use.

***1. Draw.io***

Draw.io is an open source technology stack for building diagramming applications, and the world’s most widely used browser-based end-user diagramming application.

Fairly speaking, I have used draw.io for almost all kinds of UML diagrams. Except for timing and interaction overview diagrams, generating diagrams from code. And the main reasons for using it are

1. Easy modeling style, which includes(intuitive interface, you don’t have to install anything, drag & drop functionality, comprehensive documentation)
2. Rich functionality(track & restore changes, various formats, a huge number of items)

I mean, you could create here not only UML diagrams, but also make a state machine for your game or just write some ideas, notes to carry about. A variety of items which you could use on your scene in draw.io is huge.

1. No lags at all. In comparison to Enterprise Architect, Visual Paradigm draw.io runs extremely smoothly.

Hereby, I recommend to use draw.io on further occasions:

1. if you want to make a relatively simple chart, you will do it much faster with draw.io
2. if you want to make some sketches, draw.io will fit perfect for such purpose
3. if you want to combine different types of diagrams in one as draw.io provides a large variety of items which you can use on each sheet

***2. Enterprise Architect(EA)***

Enterprise Architect is an integrated modeling platform. I have used it only for creating class diagrams from existing code, but it’s much more powerful.

EA in an environment that provides a user an ability to design, create, test its complex projects.

The main benefits of Enterprise Architect are the following:

1. One-click HTML and document generation
2. Enterprise Architect supports generation and reverses engineering of source code for many popular languages.
3. Test and Debug
4. Develop and visualize software. Test and verify correct behavior. Simulate processes. Set and manage test points. Debug and inspect executing software. Advanced simulation, testing tools, team-based repositories, version control and more.
5. Comprehensive modeling options.

As you can see, EA is a full life cycle modeling for:

• Business and IT systems

• Software and Systems Engineering

• Real-time and embedded development

And I highly recommend to use it when you are contributing or managing an extensive project with a lot of steps before final publishing and not to use it in simple projects.

Among other modeling tools it worth to be mentioned Visual Paradigm.