УДК 378.147

Yersultanova, Z.S.
c.t.s., AssociateProfessor, KSPU
Tanatova, M.
3rd year student of specialty
«5B011900 – Foreign language:
two foreign languages»,
KSPU, Kostanay, Kazakhstan
Duisenova, D.
2nd year student of specialty
«5B011900 – Foreign language:
two foreign languages»,
KSPU, Kostanay, Kazakhstan

PROJECT WORK "PICTURES ON THE PROGRAM INKSCAPE"

Abstract

The article describes how to draw some elements in the INKSCAPE program. How to create an electronic application that is embedded in the WEB pages of the INKSCAPE software, using the HTML hypertext markup language. The result of creating an interactive application is shown.

Key words: *graphics, colors, tool, drawn, Inkscape, HTML, Web pages, tags.*

1 Introduction

Inkscape is a free and open-source vector graphics editor; it can be used to create or edit vector graphics such as illustrations, diagrams, line arts, charts, logos and complex paintings. Inkscape's primary vector graphics format is Scalable Vector Graphics (SVG), however many other formats can be imported and exported.

Each object in Inkscape has several designs which determine its style. All of the designs can generally be set for any object.

Fill: can be a solid color, a pattern, a linear or radial gradient, custom swatch, inherited from a parent object. The color selector has RGBA, HSL, CMYK, Color Wheel, Color Management System (CMS) color options available, but all selected colors are currently converted to RGBA. Gradients can have multiple stops, radial supports optional direct or reflected gradients. All colors can have an alpha value specified. Patterns can be constructed from any collection of objects, or one of the several supplied stock patterns can be used.

2 Materials and methods

Stroke fill: can have the same values as fill, but is applied to the object's stroke.

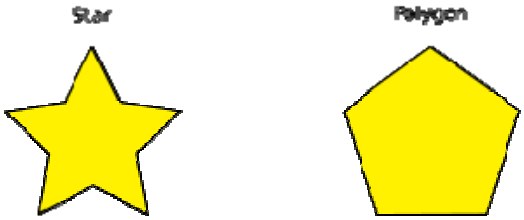
Stroke style: width can be set by 9 different measurement (pixels, inches, meters, etc.) settings; join (corners) styles featured are miter, rounded or bevel joints; cap styles available are butt, round or square; dash strokes of 35 (and custom) styles with configurable offsets are available; markers for start, mid and end of various (over 65) types (arrows, dots, diamonds, etc.) are supported.

Opacity: specifies alpha value for all fill colors. Each object has a distinct opacity value, which e.g. can be used to make groups transparent.

Filters: the fill & stroke menu has an easy-to-use slider for Gaussian blur of each object; there are hundreds of categorized filter options under the SVG filters can be constructed using the >Filters menu.

Stars are the most complex and the most exciting Inkscape shape. If you want to wow your friends by Inkscape, let them play with the Star tool. It's endlessly entertaining – outright addictive [1]!

The Star tool can create two similar but distinct kinds of objects: stars and polygons. A star has two handles whose positions define the length and shape of its tips; a polygon has just one handle which simply rotates and resizes the polygon when dragged:



Picture 1 – Star and poligon

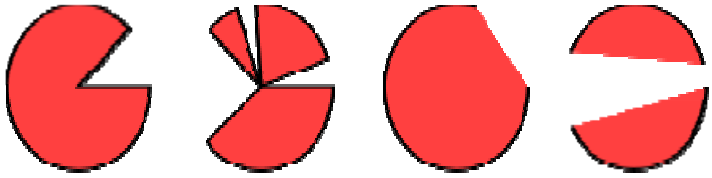
In the Controls bar of the Star tool, the first two buttons control how the shape is drawn (regular polygon or star). Next, a numeric field sets the *number of vertices* of a star or polygon. This parameter is only editable via the Controls bar. The allowed range is from 3 (obviously) to 1024, but you shouldn't try large numbers (say, over 200) if your computer is slow.

The Ellipse tool (F5) can create ellipses and circles, which you can turn into segments or arcs. The drawing shortcuts are the same as those of the rectangle tool:

- With Ctrl , draw a circle or an integer-ratio (2:1, 3:1, etc.) ellipse.
- With Shift , draw around the starting point as center.

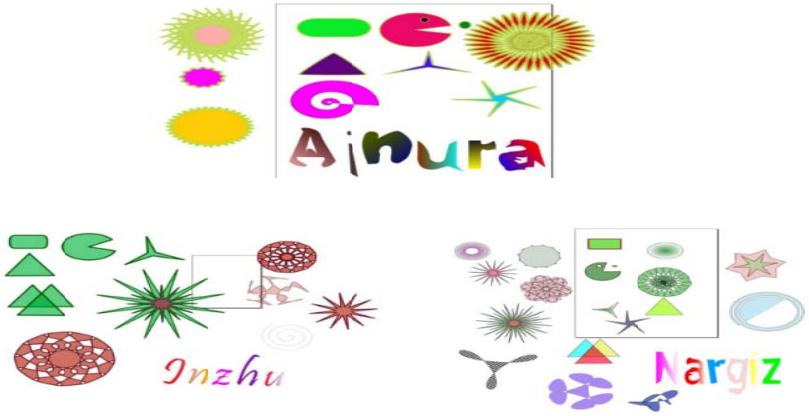
Let's explore the handles of an ellipse. Select this one:

Once again, you see three handles initially, but in fact they are four. The right most handle is two overlapping handles that let you “open” the ellipse. Drag that rightmost handle, then drag the other handle which becomes visible under it, to get a variety of pie-chart segments or arcs. (Picture2) [2].



Picture 2 – Ellipses

To get a *segment* (an arc plus two radii), drag *outside* the ellipse; to get an *arc*, drag *inside* it. Above, there are 4 segments on the left and 3 arcs on the right. Note that arcs are unclosed shapes, i.e. the stroke only goes along the ellipse but does not connect the ends of the arc (*Picture 3).*



Picture 3 – The pictures on Inkscape for project work

3 Results

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript it forms a triad of cornerstone technologies for the World Wide Web [1]. Web browsers receive HTML documents from a webserver or from local storage and render them into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

Process of work on html using Inkscape.

Plan:

- Objectives and goals of the work.
- Process of work on HTML.
- Conclusion.

Objectives and goals of the work:

- Objective: to master work with web pages for further use in personal practice.
- Goals: to introduce with the project by means of the tasks executed in the program Inkscape through WEB pages made on HTML.

Process of work on HTML.

1. Algorithm of actions for the main page web-html:

- open a notebook and write the code for the main page;
- prepare a file in the format jpeg and paste it into the code.

2. Algorithm of actions for the planning page:

- open a notebook and write the code for the header page using hyperlinks to pre-executed tasks in the Inkscape program;
- prepare 2 files in jpeg format and paste it into the code.

3. Algorithm of actions for creating the final html-page:

- open the notebook and write the code for the final html-page;
- insert a side-by-side "project" page, in which the main three html pages are connected (the web page of the header page + the web-static + plain-text webmail) to the code;
- insert the second authoritative html-page in the code;
- get the result (Picture 4).

Picture 4 – The title page of project work and cods on html

4 Discussion

Nowadays there are so many social and science networks. If you want something to know, for example about new technology, you just will go to Google Chrome, and write in google founder, you can read more information in Internet, exactly in networks. All the people think that it is very useful for them [7].

In fact HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets. Tags such as <img /> and <input /> directly introduce content into the page. Other tags such as <p> surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags, but use them to interpret the content of the page [8].

5 Conclusions

When writing this project, the existing languages and editors of the site creation were analyzed, sources on the topic of work were considered, and a site on the topic "Project works on Inkscape" was developed.

The developed site gives the user the opportunity to work with web pages for further use in personal practice.

Thus, the goal of the work has been achieved, the tasks have been accomplished.

References

1 Zip file for this guide [Electronic resource]. Access mode: http://people.orie.cornell.edu/-jmd388/design/guides/textext.zip.

2 My Page [Electronic resource]. Access mode: http://people.orie.cornell.edu/jmd388.

3 Inkscape [Electronic resource]. Access mode: http://inkscape.org.

4 TeXtext [Electronic resource]. Access mode: http://pav.iki.fi/software/textext.

5 Ghostscript and GSview [Electronic resource]. Access mode: http://pages.cs.wisc.edu/ ghost.

6 Image Magic [Electronic resource]. Access mode: http://www.imagemagick.org.

7 Pstoedit [Electronic resource]. Access mode: http://www.helga-glunz.homepage.t-online.de/-pstoedit.

8 HTML [Electronic resource]. Access mode: https://en.wikipedia.org/wiki/HTML.

9 "HTML5". World Wide Web Consortium. June 10, 2008. Retrieved November 16, 2008.

10 "HTML5, one vocabulary, two serializations". Retrieved February 25, 2009.

11 Tags [Electronic resource]. Access mode: https://www.w3schools.com/TAGS/tag_article.asp

Article was received by the editorial office: 12.11.2018

ЕРСУЛТАНОВА, З.С., ТАНАТОВА, М., ДУЙСЕНОВА, Д.

«INKSCAPE ПРОГРАММАСЫНДАҒЫ СУРЕТТЕР» ЖОБАЛЫҚ ЖҰМЫСЫ

«Inkscape программасындағы суреттер» жобалық жұмысы – интернет желісінде жұмыс істейтін электронды қосымшасын жасауға арналған ақпараттық технологиялардың бір түріне жатады. Электронды қосымшаны жасау барысында студенттің компьютер программаларын қолдану дағдылары артады. HTML тегтерін қолданып электронды қосымшаның беттеріне әртүрлі мәтіндік, графикалық, аудио, видео ақпаратты, интерактивті ойындарды енгізуге болады. Интерактивті батырмалар қосымшаның әр парағын жеке-жеке қарауға мүмкіндік береді. Мультимедиялық құралдарды құрастыру барысында студенттің творчестволық қасиеттері дамып, компьютерлік біліктілігі артады. Компьютерлік технологияларды үйрену арқылы студент компьютерлік сауаттылығы жоғары маман болып қалыптасады. Ол өзін болашақ маман иесі ретінде өз жұмыстарында компьютерлік жобалар жасауға дайындайды.

“Information and communication technologies” пәнін оқыту барысында жасалған творчестволық жобалық жұмыстың нәтижесі осы мақала желісін құрайды.

Кілт сөздер: *графика, түстер, құрал, сызылған, Inkscape, HTML, веб-беттер, тегтер.*

ЕРСУЛТАНОВА, З.С., ТАНАТОВА, М., ДУЙСЕНОВА, Д.

ПРОЕКТНАЯ РАБОТА «РИСУНКИ НА ПРОГРАММЕ INKSCAPE»

«Проектная работа «Рисунки на программе Inkscape» является одним из видов информационных технологий для создания электронного веб-приложения. На момент создания электронного приложения у студентов повышаются навыки использования компьютерных программ. Используя

HTML-теги, вы можете вставлять различную текстовую, графическую, аудио, видеоинформацию и интерактивные игры на страницы электронных приложений. Интерактивные кнопки позволяют просматривать каждую страницу приложения в отдельности. При разработке мультимедийных инструментов развиваются творческие качества ученика и повышаются его компьютерные навыки. Изучая компьютерные технологий, студент станет высококвалифицированным специалистом со знанием компьютерной грамотности. Он готовит себя к будущим навыкам работы на компьютере в своей работе в качестве будущего профессионала.

В данной статье приводится результат творческой работы над проектом, которая прошла в рамках курса «Информационные и коммуникационные технологии», является актуальной темой в подготовке специалистов педагогического направления.

Ключевые слова: *графика, цвета, инструмент, нарисованный, Inkscape, HTML, веб-страницы, теги.*

УДК 004.422.81

Salykova, O.S.
c. t. s., associate professor of Software Department,
KSU named after A. Baytursynov
Ivanova, I.V.
c. p. s., docent of Software Department,
KSU named after A. Baytursynov
Zhiyenbayeva, A.A.
2nd year master student of specialty
«6M070400 – Computer Engineering and Software»,
KSU named after A. Baytursynov
Tuletaev, E.S.
2nd year master student of specialty
«6M072400 – Technological Machines and Equipment»,
KSU named after A. Baytursynov,
Kostanay, Kazakhstan

FEATURES OF USING REST-ARCHITECTURE FOR DEVELOPMENT OF CLIENT-SERVER APPLICATIONS

Abstract

This article considers features of using REST-architecture for development of client-server applications. HTTP client libraries for Java programming language and examples of creating GET and POST requests on Java are given. The main principles of working with Restlet framework for development of applications on Java programming language are provided.

Key words: *REST-architecture, client-server application, HTTP, Restlet, Java programming language.*

1 Introduction

Nowadays, there are a lot of ways to create client-server applications, and one of the widespread one is REST API. REST is a style of software architecture for distributed hypermedia systems; that is, systems in which text, graphics, audio, and other media are stored across a network and interconnected through hyperlinks. It stands for REpresentation State Transfer, which requires clarification because the central abstraction in REST – the *resource* – does not occur in the acronym. A resource in the RESTful sense is anything that has an URI; that is, an identifier that satisfies formatting requirements. The formatting requirements are what make URIs *uniform*. Recall, too, that URI stands for Uniform *Resource* Identifier; hence, the notions of *URI* and *resource* are intertwined.