

STUDENTS' PROJECT ASSIGNMENTS ON THE SUBJECT OF „PICTURE BOOKS“ CREATED IN THE COURSE OF GRAPHIC TECHNOLOGY

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SAŽETAK

U radu su prikazani izabrani radovi studenata Informatičkog dizajna Tehničkog veleučilišta u Zagrebu na temu "Slikovnica", nastali u sklopu kolegija Grafičke tehnike. Radove su dizajnirali studenti pod mentorstvom dr. sc. Aleksandre Bernašek Petrinc, dr. sc. Katje Milković i Igora Ščekića. Projekt se sastojao od tri dijela; izrada nacrtu projektnog zadatka, dizajn svih segmenata projekta prema projektnom zadatku te priprema gotovog proizvoda za tisak i web. Zadatak je uključivao gotovi tekst kao smjernice za izradu slikovnice te ograničenja pri izradi koja uključuju kreiranje cjelokupnog dizajna u vektorskoj grafici. Ova ograničenja postavljena su kako bi studenti razvili vještine kreiranja preciznog i tehnički ispravnog dizajna kroz simulaciju interakcije s klijentom kao naručiteljem, što je ključno za profesionalni rad u grafičkoj industriji. Studenti su pokazali temeljito razumijevanje procedura i metoda izrade slikovnice od početne ideje do gotovog proizvoda. Poseban naglasak je stavljen na proces istraživanja i skiciranja, izradu prototipova te iterativni pristup dizajnu, što je rezultiralo visokokvalitetnim materijalima spremnim za otiskivanje i prikaz na webu. Osim tehničkih vještina, projekt je također omogućio studentima da razviju kreativne sposobnosti i sposobnost vizualnog pripovijedanja. Radovi su odražavali različite stilove i pristupe ilustraciji, te su demonstrirali kako se vizualni elementi mogu koristiti za prenošenje priče i emocija. Ovaj aspekt rada je ključan za dizajn slikovnica, koje moraju biti privlačne i razumljive djeci.

Ključne riječi: *studenski radovi, projekt, Tehničko veleučilište u Zagrebu, dizajn slikovnice, vektorska grafika*

ABSTRACT

The paper presents selected projects by students of Information Design from the Zagreb University of Applied Sciences on the topic of "Picture Books," created as part of the assignment on Graphic Techniques course. The works were designed by students under the mentorship of Aleksandra Bernašek Petrinc, PhD, Katja Milković, PhD, and Igor Ščekić. The project consisted of three parts: creating a draft project assignment, designing all segments of the project according to the assignment, and preparing the final product for printing and web. The task included a complete text as guidelines for creating the picture book and constraints that involved designing the entire project in vector graphics. These constraints were set to help students develop skills in creating precise and technically correct designs through simulating interaction with a client, which is crucial for professional work in the graphic industry. The students demonstrated a thorough understanding of the procedures and methods of picture book creation from the initial idea to the final product. Special emphasis was placed on the research and sketching process, prototype development, and an iterative approach to design, resulting in high-quality materials ready for printing and web display. In addition to technical skills, the project also allowed students to develop their creative abilities and visual storytelling skills. The works reflected various styles and approaches to illustration, demonstrating how visual elements can be used to convey stories and emotions. This aspect of the work is crucial for picture book design, which must be engaging and understandable for children.

Keywords: *student works, project, Zagreb University of Applied Sciences, picture book design, vector graphics*

1. UVOD

1. INTRODUCTION

Through the entire course of IT design at the Technical Polytechnic in Zagreb, students learn techniques that will help them to independently create their own design solutions, and develop their own personal style in the process that will be recognized and appreciated within the industry. The development of special skills for creating quality works and critical thinking is of great importance for every young designer. Based on the acquired knowledge and competences, it will be easier to get the desired job after completing the studies. [1]

Through the Graphic Techniques course, students are trained to independently create their own ideas and explore the role and purpose of graphic design today. They go through the tools and techniques relevant to the graphics industry in order to be competent to complete any task put before them. [2, 3]

The theme of the picture book unites all phases of the work of a graphic designer, from formatting the received text, creating visuals according to the given template, graphic preparation and unification of all segments into a harmonious whole, and preparing the finished product for print and web. [4, 5, 6, 7, 8]

Through several academic years and various generations of students, it has been shown that this approach to acquiring knowledge about various tools and the field being worked on is optimal and brings the best results. Through independent work, students develop various skills necessary to achieve positive competitiveness both at the polytechnic and in the business world. [2, 3]

2. PROJEKTNI ZADATAK - OBLIKOVANJE SLIKOVNICE

2. SPECIFICATION - DESIGNING A PICTURE BOOK

2.1. THE SPECIFICATION STIPULATED AS FOLLOWS:

- Number of pages: 8 pages + cover and end pages - 12 pages

- Dimensions of the picture book: 19 x 19 cm
- Cover dimensions (picture book cover): 20 x 20 cm
- End pages – adapt to the design of the picture book
- Text – finished proofread text (three defined themes: "The Search for the Diamond", "Tropical Adventures" and "Friends of the Praying Mantis")
- Specifications for printing
- Specifications for the digital version of the picture book

2.2. THE PROCESS OF MAKING THE PICTURE BOOK CONSISTED OF SEVERAL KEY STAGES, WHICH ENSURED THAT THE FINAL PRODUCT WAS OF HIGH QUALITY, ATTRACTIVE AND FUNCTIONAL. BELOW IS THE DESCRIPTION OF EACH STEP IN THE PROCESS:

2.2.1. IDEA AND RESEARCH

The first step in creating a picture book involves developing a basic idea and conducting research. In it, students:

- Determine the target audience: They consider the age and interests of the children for whom the picture book is intended.
- Explore existing picture books: They analyse examples of existing picture books to understand what works and what doesn't.
- Develop the concept: They create the basic concept of the story and the main characters, and define the illustration style they will use.

2.3.2. SKETCHING AND PLANNING THE APPEARANCE OF THE FINAL PRODUCT

This step involves making rough sketches and planning the layout of each page of the picture book:

- Storyboard: Creating the storyboard that shows the basic layout of each page and the arrangement of text and illustrations.

- Sketching characters and scenes: Creating initial sketches of main characters and scenes with pencil on paper, to visualize the story.
- Composition planning: Deciding on the arrangement of elements on each page to ensure good visual flow.

2.2.3. DIGITAL ILLUSTRATION

After the sketches are approved, the illustrations are made:

- Vector graphics: Use tools such as Adobe Illustrator to create accurate and scalable illustrations.
- Colouring and texturing: Adding colours and textures to achieve the desired visual effect.
- Finalization of characters and scenes: Creation of final versions of all illustrations that will be used in the picture book.

2.2.4. PAGE DESIGN AND LAYOUT

This step includes text and illustrations integration into the final picture book design:

- Page design: Creation of the design of each page, including the cover, as well as end papers, including positioning of text and illustrations.
- Typography: Selection of fonts and styles that will be used for the text, taking into account legibility and visual harmony with the illustrations.
- Final review: A detailed check of each page to identify and correct any errors.

2.2.5. PREPARATION FOR PRINT AND WEB

After the design is completed, the picture book is prepared for printing and digital distribution:

- Preparing the files for printing: Creation of high-quality PDF files that meet the technical specifications of the printer.
- Optimizing for the web: Adjusting files for digital distribution, including optimizing the size and quality of images for fast loading and good display on screens.

2.2.6. EVALUATION AND FEED-BACK

The final step includes the evaluation of the final product:

- Presenting the picture book to colleagues and mentors

Through this structured process, students develop the key skills and knowledge needed to professionally produce picture books and similar graphic products, ensuring a high-quality final product.

3. REZULTATI

3. RESULTS

Six picture books, representative examples, were selected for analysis in this paper. Two picture books from the given themes "Searching for a Diamond", "Tropical Adventures" and "Friends of the Praying Mantis" were shown each, through pictures of the entire picture books (12 pages) and enlarged images of one selected page for each design. Selected works were chosen for their aesthetic appeal, because the illustrations in the picture books are not only decorative, but are crucial for the interpretation of the story. The created visual expressiveness results in harmony, which we observe between the illustration and the text, which makes them simple and clear for easier understanding and adapted to the age for which they are intended.

The presented selected projects by second year students show the mastery of the tools of the graphic applications Adobe Illustrator and Adobe InDesign, knowledge of the procedures and methods of creating picture books and similar graphic products from idea to finished product, and the creation of quality materials ready for printing and display on the web. As part of such creative projects, students developed technical, communication and presentation skills essential for professional growth and development.



Figure 1 Student Antonija Glasnović, picture book title: Searching for a Diamond, overview of the entire picture book, 12 pages



Figure 2 Student Antonija Glasnović, picture book title: Searching for a Diamond, preview of page 1

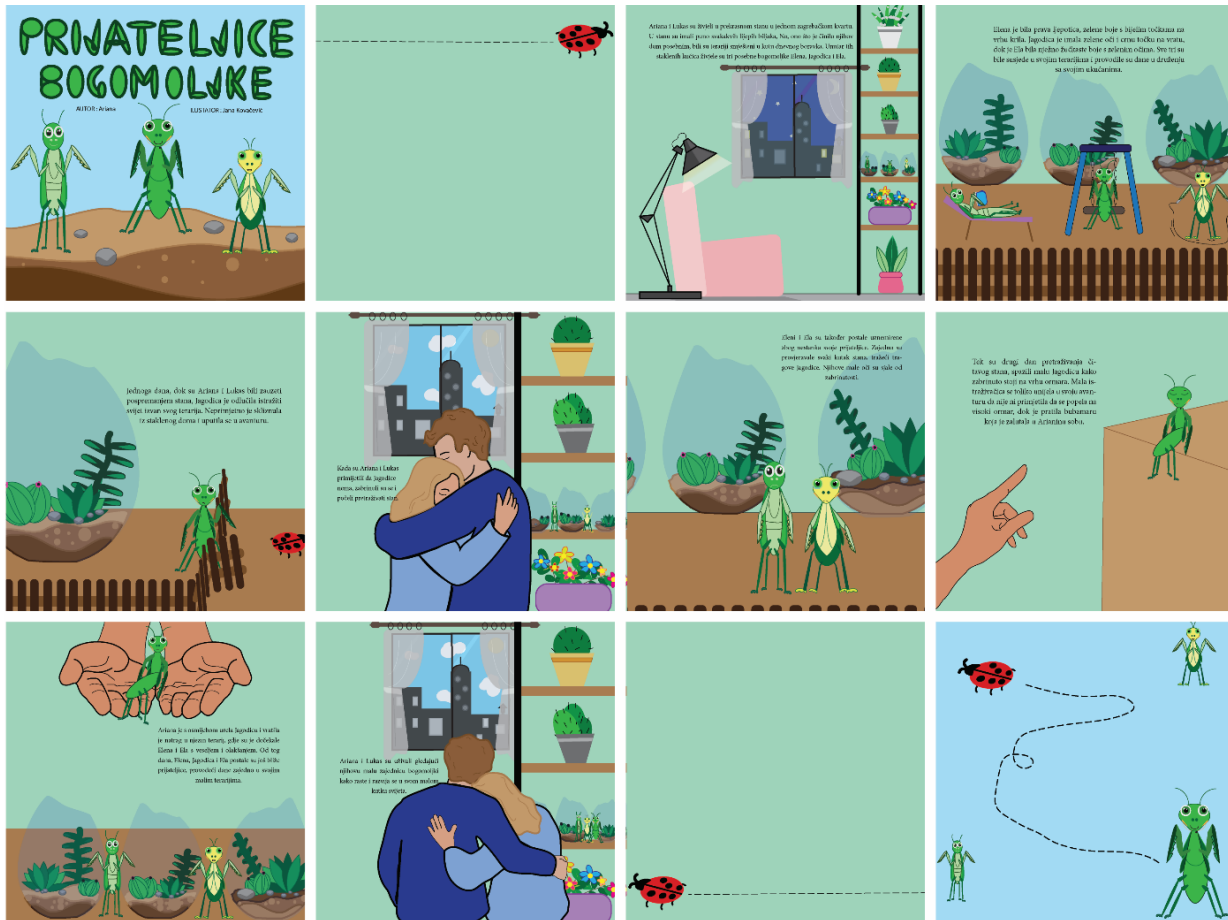


Figure 3 Student Jana Kovačević, picture book title: Friends of the Praying Mantis, overview of the entire picture book, 12 pages



Figure 4 Student Jana Kovačević, picture book title: Praying Mantis Friends, preview of page 2



Figure 5 Student Vito Vdović, picture book title: Tropical Adventures, overview of the entire picture book, 12 pages



Figure 6 Student Vito Vdović, picture book title: Tropical Adventures, overview of page 2



Figure 7 Student Marta Kaleta, picture book title: Searching for a Diamond, overview of the whole picture book, 12 pages

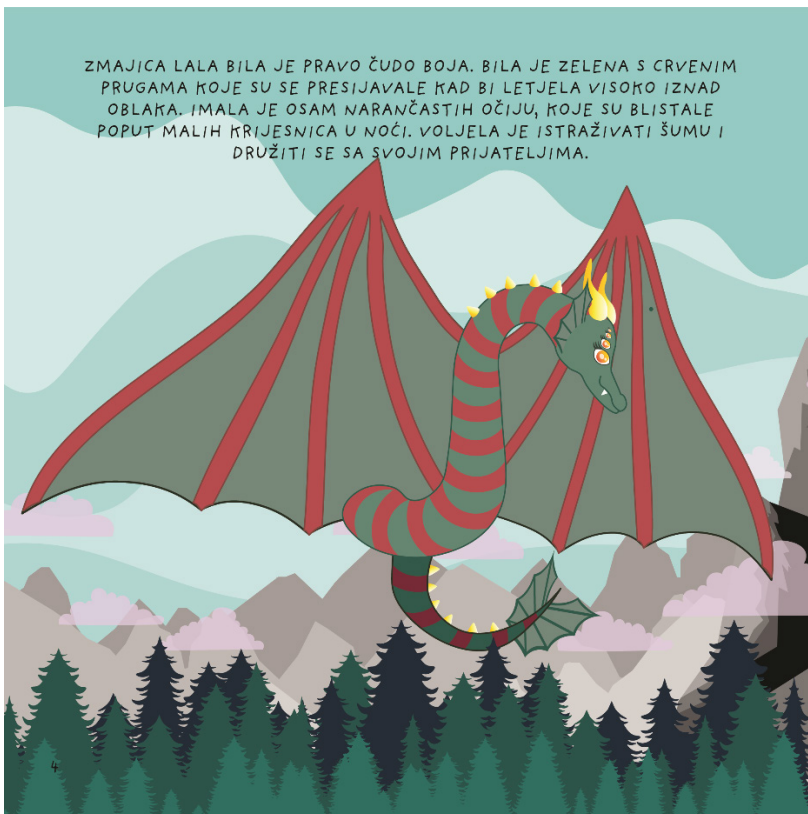


Figure 8 Student Marta Kaleta, picture book title: Seraching for a Diamond, preview of page 2



Figure 9 Student Ivana Cesar, picture book title: Friends of the Praying Mantis, overview of the entire picture book, 12 pages



Figure 10 Student Ivana Cesar, picture book title: Friends of Praying Mantises, preview of page 5



Figure 11 Student Martina Kuzmic, picture book title: Tropical Adventures, overview of the whole picture book, 12 pages



Figure 12 Student Martina Kuzmic, picture book title: Tropical Adventures, preview of page 5

4. ZAKLJUČAK

4. CONCLUSION

Through the described project assignment, the students demonstrated their understanding and skilful application of various graphic techniques. Starting from the initial conceptualization phase, where they developed creative ideas and plans, to the final preparation of the product for print and digital platforms. Each work represents a synthesis of the technical knowledge and creative abilities of the students. In addition to meeting academic standards, these papers clearly demonstrate the students' ability to face real-world challenges and be competitive in the job market. These projects are more than just exercises, because they represent an authentic experience of cooperation with a client, simulating real situations that students will encounter in their future careers. In addition to technical skills, students developed the ability to solve problems, creativity, and cooperation and communication with the client. The final results of these projects not only reflect the expertise and talent of the students, but open the door for further research and advancement in the field of graphic technology and design. These young designers represent the future of the industry with their passion, dedication and outstanding skills demonstrated through their work.

5. REFERENCE

5. REFERENCES

- [1.] Uglješić, V.; Bernašek, A.; Kovačiček, H (2014). Motivacija studenata na laboratorijskim vježbama kroz sudjelovanje u stvarnom natječaju Tiskarstvo & Dizajn 2014 , doc. Dr. sc. Jana Žiljak Vujić (ur.), str. 204 – 208, ISBN 978-953-7064-26-6
- [2.] Peternel, L.; Žiljak Gršić, J.; Leiner Maksan, U. (2020). Dizajn plakata na temu globalne pandemije covid 19: radovi studenata i studentica Tvz-a Polytechnic and Design, DOI: 10.19279/TVZ.PD.2020-8-2-01
- [3.] Leiner Maksan, U.; Žiljak Gršić, J.; Peternel, L.; Andrić, Z.; (2020). Aktivistički plakati „Obnovimo Zagreb nakon potresa“ radovi studenata i studentica Polytechnic and Design, DOI: 10.19279/TVZ.PD.2020-8-3-01
- [4.] Sipe, L. R. (2007). Storytime: Young Children's Literary Understanding in the Classroom Teachers College Press; Illustrated edition, New York, ISBN-10: 0807748285
- [5.] Nikolajeva, M., & Scott, C. (2001). How Picturebooks Work. Routledge, New York, DOI: <https://doi.org/10.4324/9780203960615>
- [6.] Arizpe, E., & Styles, M. (2015). Children Reading Picturebooks: Interpreting Visual Texts. Routledge, New York, DOI: <https://doi.org/10.4324/9781315683911>
- [7.] Hall, J. C., & Jones, L. K. (2008). Exploring Children's Picture Books Through Art, Literature, and Literacy. Stenhouse Publishers, Portland, DOI: <https://doi.org/10.1080/00043125.2021.1905434>
- [8.] Serafini, F. (2013). Reading the Visual: An Introduction to Teaching Multimodal Literacy. Teachers College Press, New York, ISBN-10: 0807754714

AUTORI · AUTHORS

• **Dr. sc. Aleksandra Bernašek Petrinec** - rođena je u Zagrebu 1986. godine. Doktorila je 2021. godine na Grafičkom fakultetu Sveučilišta u Zagrebu. Nakon završenog fakulteta zapošljava se na Grafičkom fakultetu Sveučilišta u Zagrebu kao asistent na Katedri Tiskarski slog i računala. Od ožujka 2012. godine radi na Tehničkom veleučilištu u Zagrebu, gdje je 2020. godine izabrana u nastavno zvanje višeg predavača. Aktivno sudjeluje na projektima Tehničkog veleučilišta u Zagrebu, kao voditelj i kao član. Od 2013. godine izabrana je na mjesto zamjenika urednika znanstvenog časopisa Polytechnic and design. Nositelj je kolegija vezanih uz grafičku tehnologiju, grafičku forenziku, upravljanje bojama i programiranje grafike. Objavljuje radove u znanstvenim i stručnim časopisima te je izlaze na relevantnim domaćim i međunarodnim skupovima.

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• **Dr. sc. Katja Milković** - rođena je 1985. godine u Puli, gdje je završila osnovno i srednjoškolsko obrazovanje. Diplomirala je 2010. godine na Grafičkom fakultetu Sveučilišta u Zagrebu, a 2023. godine stekla doktorat znanosti na istom fakultetu. Od ožujka 2010. godine, stiče bogato radno iskustvo u grafičkoj industriji, radeći na vodećim pozicijama u domaćim i međunarodnim tvrtkama. Trenutno radi kao predavač na Sveučilištu Jurja Dobrile u Puli te kao asistent vanjski suradnik na Tehničkom veleučilištu u Zagrebu. Tijekom obrazovanja i akademske karijere sudjeluje u nekoliko znanstvenih istraživanja. te objavljuje radove iz tema grafičke tehnologije, digitalnog tiska i inovacija u grafičkoj industriji u relevantnim bazama, uključujući Q2, Q3 i Q4 časopise. Redovito sudjeluje na domaćim i međunarodnim stručnim i znanstvenim skupovima, gdje prezentira svoja istraživanja i rezultate. Uz aktivno znanje talijanskog, engleskog i njemačkog jezika, područje interesa i istraživanja uključuje procese tiska, papir kao materijal u grafičkoj tehnologiji te kvalitetu otisaka i djelovanje na promatrača.

• **Igor Ščekić** - je grafički dizajner, ilustrator i digital artist iz Zagreba. Također je vanjski suradnik na Tehničkom veleučilištu u Zagrebu. Diplomirao je na Grafičkom fakultetu Sveučilišta u Zagrebu – smjer: Dizajn grafičkih proizvoda. Tijekom i nakon studija počinje raditi na brojnim projektima za inozemne i domaće klijente, samostalno i u timu s drugima, što nastavlja i nakon završenog studija. Izbor u zvanje vanjskog asistenta stječe 2023. godine, a trenutno je zaposlen kao grafički dizajner.