

# STORYBOOK WITH AUGMENTED REALITY

*project booklet by elvin akkan*

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PROJECT DEFINITION &  
CONCEPTUAL DESCRIPTION

Due to developing technology children’s attention bgein to focus on technological devices like televisions, computer games etc.In that sense, their social lifes effected by this changing behaviors. My project focuses on this problem. It’s aim is to increase habituation of reading. I started to think about an answer for how do book become more attractive for children.

The answer was to designing a storybook that can be also read by augmented reality. This means when a person shows the illustrations of the story book to the camera, he can see the illustrations as they are moving on the computer scene.

The project’s aim is basically to take children’s attention and improve their interest in reading. This project will be designed for Turkish children; the main reason why the book is in Turkish is, there are very few innovative designs for children. For example, compare to France, if you make a search for children books you will see lots of different alternatives for French children. By this project it is important to make something different for children and increase their attention in read- ing. As we all know, with the developing of tech- nology many people lost their desire on reading, but by this project when the children discover the enjoy of moving characters of book, reading should become more enjoyable for them and by this interactive reading children will feel them- selves close to the characters of the story.

## OBJECTIVES & GOALS

*This project will raise the children's interest in reading:*

It will offer a different way of reading to the children. The most important point in this project is it provides an interactive reading. By this way children can see themselves as the part of book because the motion of the characters are related to their wish. If they choose to read by aug- mented reality they will get enjoy of it.

In the use of a camera the illustrations of the book will appear on the computer scene and according to coding they will move. So, that will make this book different from the other child books. On one hand children will have enjoy from the animation and on the other they will curious about what is happening in the story and begin to read it.

*This project makes me learn use Flash and improve my skills in doing illustrations and designing a book:*

In the process of making this project I will learn using Flash, which is very important for the graphic designers, and as I am designing the book and making the illustrations I will improve myself in these subjects.

## TARGET AUDIENCE

In this project my target audience is children whose ages are between 10 and 12. I decided to choose these ages because as they can read fluently but they still want to read things in funny way and also they are big enough to use and under- stand about the technology, augmented reality.

### My project will...

- Be interactive with the reader
- Create an enjoyable reading for children
- Improve my skill in doing illustrations
- Make me learn Flash and coding

## TECHNICAL INFORMATION

- Drawing & Animating & Coding*
- Adobe Illustrator (for drawings)
  - Adobe Flash (for animations)
  - Flash Libraries (helped me with the coding) also;
  - Camera
  - Set-up products (lamps, platform)

## BACKGROUND INFORMATION

I came up with this project at the point of my personal interest. I wanted to do something different and seem impossible to do for me. Also, the project has to find a solution to a problem and should be interactive with people. While I was doing researches and brainstorming to find a topic for my final project I saw some projects with augmented reality, the ones that we see on buildings or on books. As, I was looking the examples of books with augmented reality I decided it was the project that I wanted to do. On one hand it seems enjoyable to do but on the other hand Flash and coding are the

parts that I had never been tried. So, I gave my decision on my project; first I will design a storybook for children, I will design the book for the kids whose ages are 8-10 and do illustrations according to the story. Then, I will learn Flash and coding to move those illustrations with augmented reality. First part is the part that I am familiar with and also it seems more enjoyable than the coding but also I wanted to force myself with coding to prove myself that I can do it.

My project does not specify a solution to a problem actually but I decided to choose this project to bring an enjoyable activity for children and push them into reading book. This project can be also seen as a solution to the absence of funny and good books for children. On one hand they can read the

book as a printed document if they wish, on the other hand they can combine it with computer and read and watch the moving illustrations on the computer screen. I guess by this storybook, a new perspective will occur and the importance of child books will increase. After, I decided to my project a new topic occurred, which story should I choose and what ages this book should target. First, I wanted to find a Turkish story because the project is for the children in Turkey, I looked 100 base works in Turkey. I found Nazim Hikmet's 'Sevda' Bulut'. I have not heard that Nazim Hikmet was writing storybooks so; I thought it is a good opportunity to make this book more popular. The book is for the children whose ages are about 8 and 10. I looked the other storybooks that are suitable for these ages. I checked their page designs, font sizes, illustrations etc. Also, I made a pedagogical research. The storybooks for 8-10 ages are usually written in 12pt size. Illustrations do not lie over the whole pages but we can see them at almost half pages. The style of the illustrations has a childish language; they try to take children's attention with sympathetic figures. 'Can Yayınları' gave me good ideas as I was designing my

storybook. Also, I talked about my book to Prof.Dr.Yuksel Yılmaz who is child neurologist and show some of my sketches. He said the sketches are suitable for those ages. 8-10 ages come equivalent to 3rd and 4th grades, so in these ages children start to read fluently mostly but still they need short sentences and they have difficulties in long paragraphs. According to this information I divided the story into short paragraphs per pages and I use white spaces mostly. I decided to use Adobe Garamond Pro in 12 pt. As I was trying to find characters for the story I looked at many illustration blogs, the illustrators who are designing children books. I commonly inspired from them to come up with the characters.

While I was trying to come up with my project and trying to solve the problems in this project I had help from many websites. For example I found a similar project by Camille SCHERRER (Magic Book). I commonly inspired by her work, also while I was trying to find characters for the story I was inspired by Bengi Gencer Illustrations and Anil Tortop Illustration because these two names are designing child books and their illustrations should have the same language with my illustrations.

## DETAILED PROJECT DEFINITION

Augmented reality is a term for a live direct or an indirect view of a physical, real-world environment whose elements are augmented by computer generated sensory input, such as sound or graphics. A viewer sees computer graphics superimposed on the real world, and in registration with the real world. According to the meaning of augmented reality, in this project children find the combination of the text and the illustrations, as they are moving due to the camera's perspective. If the reader wants to see the graphics from a different point of view, they simply move the book, or reorient themselves with respect to the book. The content creator does not need to determine ahead of time what viewpoint the reader should see. The readers can interactively move the book, or reorient themselves to see the graphics from the perspective of their choice.

### *My working structure will be covered in 4 departments;*

Subject: Finding a suitable story

Illustrating and designing the book

Research: Pedagogical research/ Examples of child books / Software

Set up the project



A image of an illustration from the book. In reality, Ayşe Kız is sitting next to the pool and when the virtual images come to stage the moon and the stars began to shining.



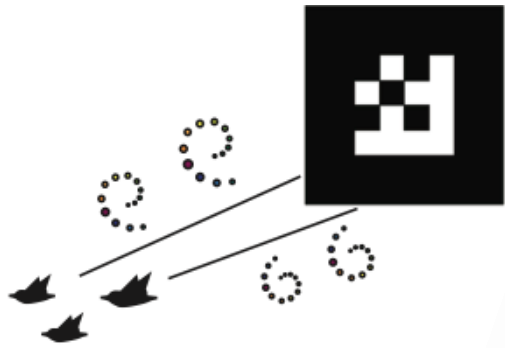
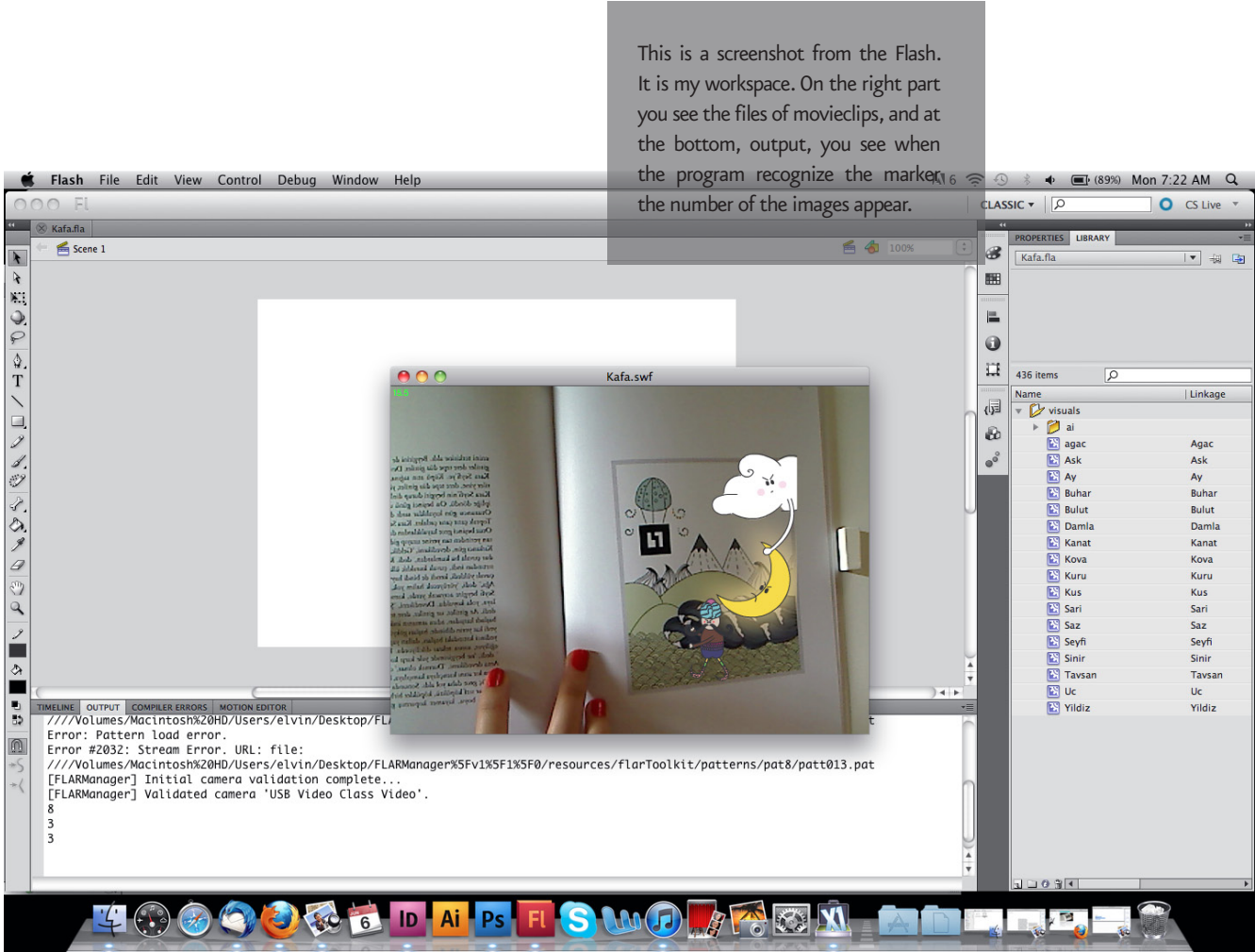
The set up of the project. With the help of a web cam which is connected to a lamb, the images are transferred from book to computer.

This is the how the project will look like when it is set up.

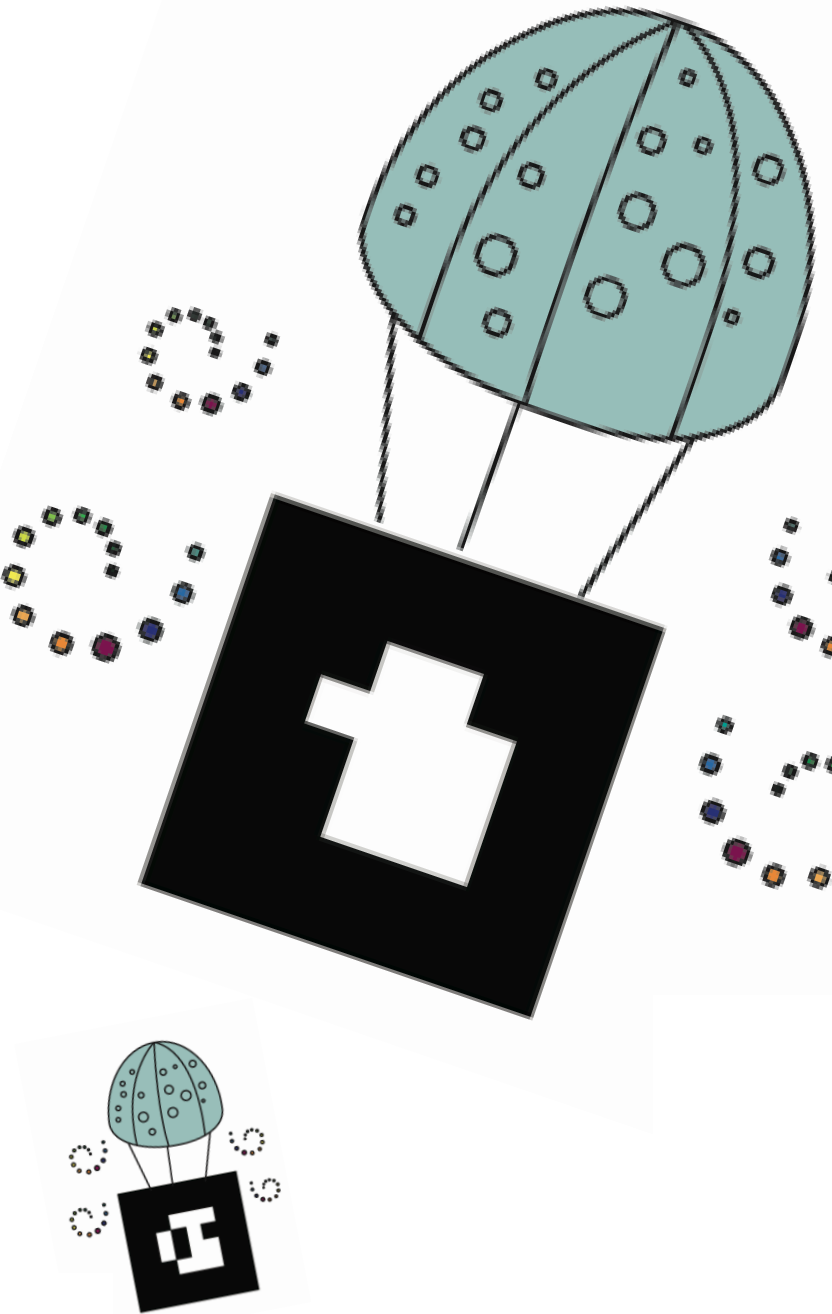


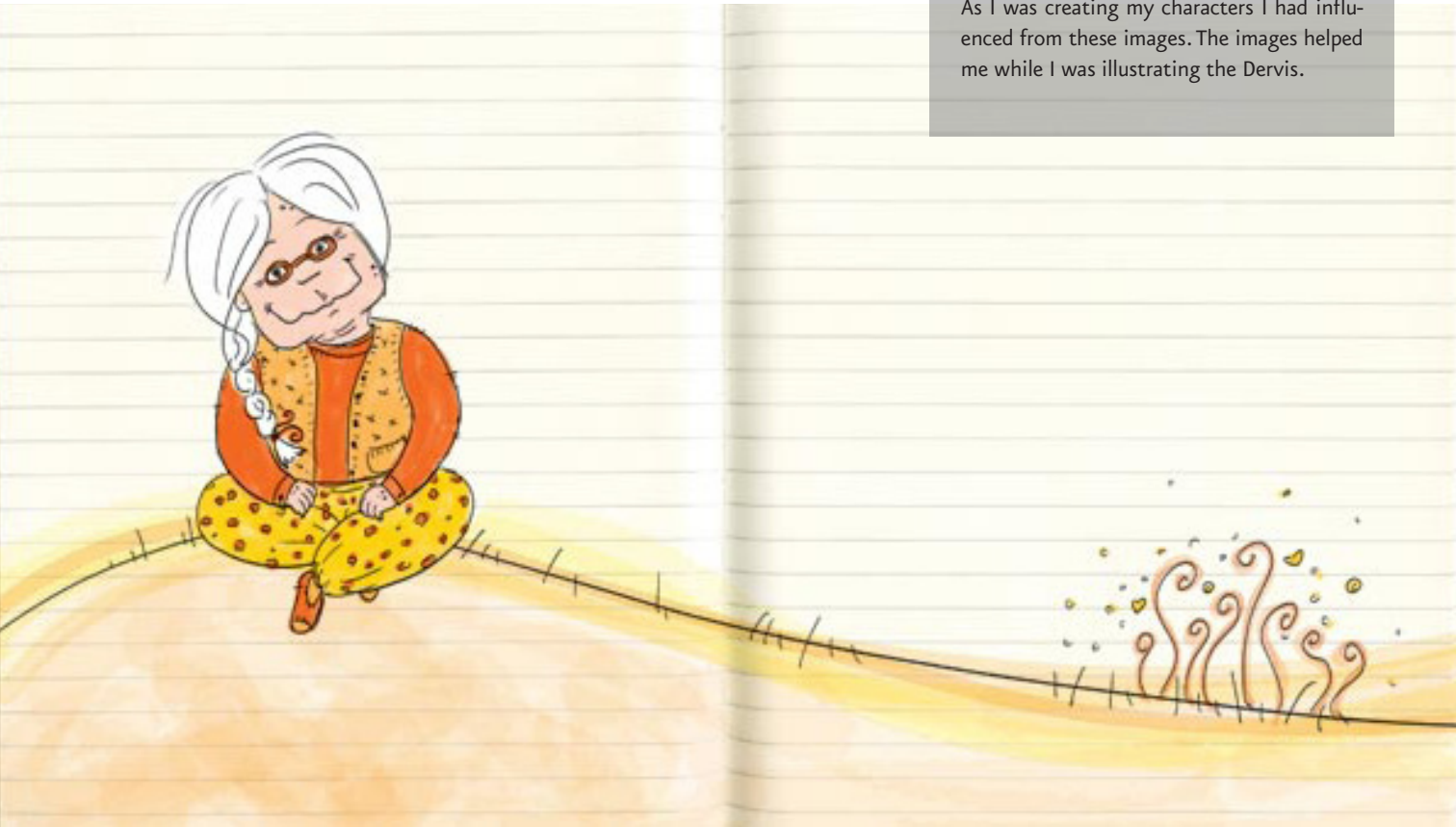
The images from real book and the movieclips; These screenshots show how the reality and virtuality are combined.





These are the markers for the augmented reality. For each marker I identified a movieclip, when the camera sees the markers it brings the right movieclip.





As I was creating my characters I had influenced from these images. The images helped me while I was illustrating the Dervis.



These girls helped me with the character of Ayse Kiz. The illustrations are from bengigencer illustrations.

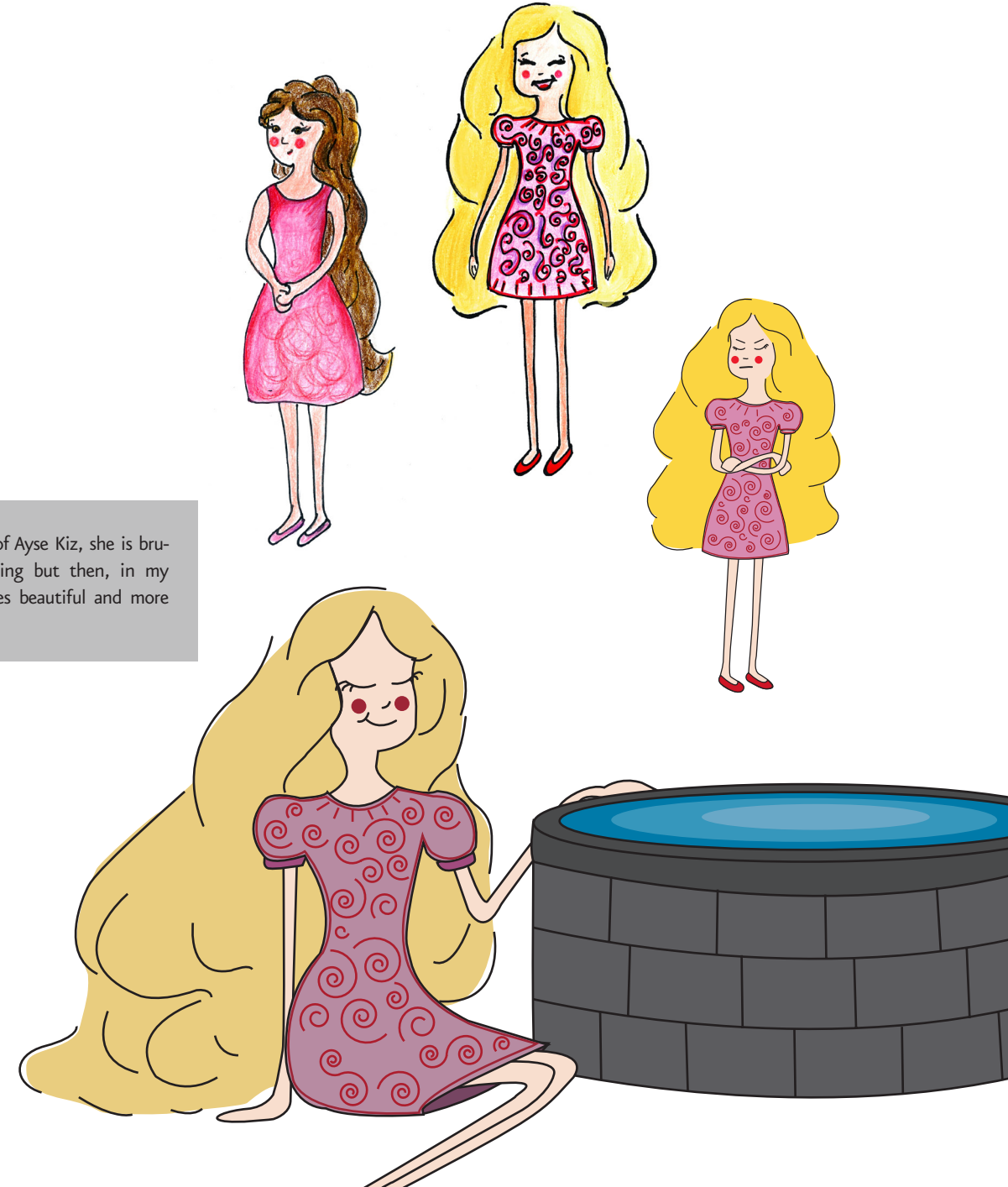


This image maybe the most I had influenced by. The structure of the composition shaped by the illustrations of Gizem Vural.





The changes of characters from the beginning of the book to the last version of it. The biggest one is the last one and the one on the left is the first version .



This is the process of Ayse Kiz, she is brunette at the beginning but then, in my opinion she becomes beautiful and more beautiful.



These are the evolution of my illustrations.  
The process from the beginning to end looks  
like I improve my illustration skill.



This is the final look of the  
illustration. The marker is  
in the form of balloon.

CREDITS

Project Owner:  
Elvin Akkan

Supervisor:  
Ekmel Ertan

Story:  
Nazım Hikmet / Yapı Kredi Yayınları

Code Help:  
Servet Ulas, Birol Aksu

Project Infulenced by:  
Camille Scherrer - Magic Book;  
Les Monde Des Montagnes /2008

Illustrations Influenced by:  
Bengi Gencer Illustrations  
Anil Tortop Illustrations  
Gizem Vural Illustrations

COLOPHON

Design: Elvin Akkan  
Font: Eureka & Eureka Sans  
Printing & Binding: Net Copy Center  
Paper: 135 gr

JUNE 2011, ISTANBUL



*I hope you like my project  
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