

USER INTERFACES

CASE STUDY

DESIGN AND DEVELOPMENT OF WEB USER INTERFACES

*Alfea School for
Fairies*

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GROUP 89



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Objectives of the system

This case study covers the design and implementation of a new user interface focused on anticipating what users might need to do and ensuring that the interface has elements which are easy to access, understand and use to facilitate those actions.

In our case, *Alfea School for Fairies* counts with a fabulous re-designed look. This new look has been implemented keeping and accomplishing Nielsen's heuristics and Van Duyne's design patterns of the last programming exercise. New functionalities included such as inner user menus and courses configuration will make the website even more usable and dynamic.

Personas

Regarding the prototype design of three personas we have used the tool Adobe XD. We provide detailed descriptions to make them as real as possible to have an idea of the end users of the website. We highlight the importance of creating designs for personas since they will be the ones that will use our website once its implementation is completed based on their needs.

As in the third programming exercise, we will keep the *Student* and *Teacher* personas.

Student

<p><i>“Dreams are so elusive and sweet but I will not let them go.”</i></p> <p>Bloom <i>Student</i></p> 	<p><i>Goals & Motivations</i></p> <ul style="list-style-type: none">· Being the best fairy· Controlling my temper· Incrementing productivity· Good user experience when using Alfea's webpage <p><i>Personality</i></p> <p><i>Bloom is such an insecure girl due to her ignorance of her true origins.</i></p> <p><i>Very stubborn and impatient. An scapist by nature.</i></p>	<p><i>Skills</i></p> <ul style="list-style-type: none">· Online shopping· Messaging· Social Networks <p><i>Platforms</i></p> <ul style="list-style-type: none">· iPad· iPhone· Laptop
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Teacher

Goals & Motivations	Platforms
<ul style="list-style-type: none">- Making his students understand all explained concepts.- Be able to properly view how his Students are progressing.	<ul style="list-style-type: none">- Computer- Tablet
Technological Skills	Personality
<p>Palladium loves the learning about the latest gadgets and how to use them to his advantage not only for teaching but for his scientific research.</p>	<p>Fun and gentle, loves teaching his students. Not very confident when speaking in public.</p>
<p>"Nobody can make you feel inferior without your permission."</p>	



Administrator

In order to test all the new functionalities added to the website we need a new end user: **Administrator**. In our specific case, the headmistress of Alfea. She has control over the whole interface.

Faragonda Administrator		<i>"Educating the mind without educating the heart is no education at all."</i>	
Goals & Motivations	Platforms		
<ul style="list-style-type: none">- Efficiency- Modernization of the school- Being a good headmistress	- Computer		
Technological Skills	Personality		
<p>Although Faragonda is a very modern woman, there are a lot of technological features that she does not completely understand</p>	<p>Kind spirited but will not put up with nonsense and will dispense discipline when needed.</p>		



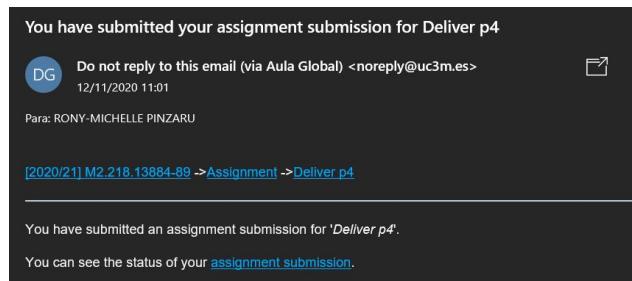


Analysis of similar websites

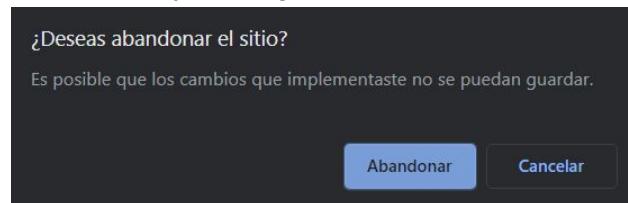
Taking into account our *Alfea School for Fairies* website we have chosen UC3M interface (Aula Global) and “Khan Academy” website, being both of them, education oriented platforms.

Aula Global: Nielsen’s Heuristics

- ❖ Visibility Status: Aula Global shows at every moment the location in which the user currently is.



- ❖ Match between system and the real world: It speaks the user's language. All functionalities are clearly differentiated and can be used in an easy way.
- ❖ User control and freedom: The user can easily leave Aula Global using the 'Log Out' button or undo the last action by clicking on the arrows.



- ❖ Consistency and standards: This website follows the common platforms conventions, such as a section for each of the different topics of the course, and a calendar pre-viewing the deadline for the next assignments.
- ❖ Error prevention: This heuristic is not met since, for instance, there is actually no way of avoiding errors such as the “Badges” button shown in the figure. It is not hidden or unavailable even though the user has no badges to show.



- ❖ Aesthetic and minimalist design: It counts with a specific color palette: blue and white. Everything is simple and organized, no excess of information.



- ❖ Help users recognize, diagnose, and recover from errors: This heuristic is met since everything that has to follow a specific pattern is specified, not allowing the user to move on with erroneous entries.

⚠ The data you sent are not right.

Aula Global: Van Duyne's Design Patterns

- ❖ When writing and managing its content, Aula Global makes sure to include distinctive html titles so that everything has a hierarchical organization and locations of content are clear.

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- ❖ To make sure there is an easy navigation framework, a category layout is included throughout the entire website, which clearly indicates where in the site the user is at. This can also be seen in the left hand side of the images.



- ❖ Throughout its entire page, Aula Global uses a global template to regulate the look of the website.

Khan Academy: Nielsen's Heuristics

- ❖ Recognition rather than recall: Khan Academy carries out this heuristic by including various dropdown menus and creating asides that control what can be seen in the central container.
- ❖ Flexibility and efficiency of use: From utilizing this site and going through a few of its courses, we can firmly state that it does aid beginner users but it does not seem to be modifiable for more experienced users. However, a frequent action that does let us perform is that of accessing the latest used course which is very efficient.



- ❖ Help users recognize, diagnose, and recover from errors: this heuristic is completed as everything that needs to be specified in a certain way is checked, in the image attached we see how an invalid code is introduced and that website warns the user of this erroneous entry.

Mis profesores y tutores

Los profesores tienen acceso a todos tus datos de Khan Academy.

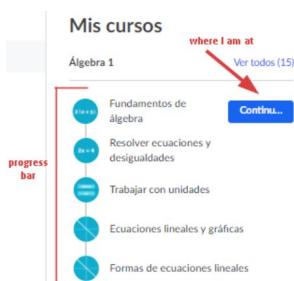
Únete a una clase

gijkijh
Código de clase inválido

- ❖ Help and documentation: Khan academy has a “Help Center” and a “Community of Users”. In the “Help Center” section any question is easily searched, and the answers to frequently asked questions are readily available.
- ❖ Match between system and the real world: we believe this is met as the website clearly shows how to operate it and uses the proper conventions for all of its actions, which makes this website easy to operate.
- ❖ Consistency and standards: from trying to complete a course in this website we can confirm that actions are clearly differentiated and use platform conventions. Examples of this would be the “Start” button to commence a test or the “Play” button to show that you will be seeing a video lesson.

Khan Academy: Van Duyne's Design Patterns

- ❖ Khan Academy uses email subscriptions to build trust and credibility. This is done automatically when you sign up and can be modified to adjust to your likings in the settings.
- ❖ Another way Khan Academy tries to build trust and credibility is by including a privacy policy, this is located in the usual place (at the bottom of the site).
- ❖ To help customers complete tasks, in this case lessons, the website includes a progressbar so the user knows at what stage they are in the course they are learning.





Description of the previous prototypes

Hi-Fi prototype initially chosen

Firstly, we made this prototype for the new website design because we found it dynamic, visual, and understandable for all the users.

The screenshot shows a website for 'Alfea' with a pink header and sidebar. The sidebar includes links for Home, About, Admissions, Studies, Research, Help Center, and Site Map. The main content area is titled 'About' and features several sections with video thumbnails and descriptions:

- School Life**: A video thumbnail for 'Winx Club - Season 1' with the caption: 'As an extremely prestigious school for fairies, we pride ourselves in our excellent academia which shapes the future leaders of tomorrow. We have had the pleasure to teach some of the most renowned political leaders, philosophers, scientists and warriors.'
- Welcome to Alfea**: A video thumbnail for 'Winx Club Gift Vid' with the caption: 'Our principal, Ms. Faragonda welcomes you to Alfea and gives you her signature introductory speech.'
- The Dormitories**: A video thumbnail for 'Winx Club Gift Vid' with the caption: 'As a boarding school, we offer the best accommodation for our students. In the following video, we give you a fun little sneak peek of the rooms'
- Work & Play**: A video thumbnail for 'Winx Club 7 - Final' with the caption: 'Here at Alfea, we are well aware that it is impossible to just study and we make sure that our students have healthy mix of academia and fun. In the following video we will show you some of the many activities they can enjoy on campus.'
- Talent Shows**: A video thumbnail for 'Winx Club 7 - Final' with the caption: 'Our alums all have various types of skills which we love to showcase in our annual Talent Show.'
- Fashion Shows**: A video thumbnail for 'Winx Fashion Show' with the caption: 'Our school has various extracurricular clubs, one being Fashion Design. Each term they host a fashion show to demonstrate their latest creations.'
- Fairy Forms**: A video thumbnail for 'Winx Club i Full M...' with the caption: 'Fairy forms or transformations are different levels of power that fairies can attain as an extension of their magical abilities. In our school, we work with our students not only to help them become full-fledged fairies, but so that they reach higher fairy forms.'
- Winx**: A video thumbnail for 'Winx Club - Enchanted' with the caption: 'This is the basic fairy form, if you have yet to unlock it, we will make sure that you do by the end of your freshmen year.'
- Enchantix**: A video thumbnail for 'Winx Club - Enchanted' with the caption: 'Enchantix is the "Final Fairy Form" in a fairy's formal education. In our curriculum, earning Enchantix is the final exam.'

On the right side, there is a sidebar with a login button, a 'NEXT EVENTS' section listing various school events, and a 'LATEST NEWS' section with updates from the school.



The screenshot shows the Alfea website's "About" page. On the left, a sidebar menu includes links for Home, About, Admissions, Studies, Research, Help Center, and Site Map. The main content area features a "School Life" section with a small image of a castle and text about the school's history. A central modal window titled "Log In" contains fields for Username ("Bloom Domino") and Password, with a "Forgot Password?" link and a pink "Validate" button. To the right of the modal is a large, colorful butterfly graphic. The footer contains a copyright notice: "© 2020 Alfea Studies".

The screenshot shows the Alfea website's "My Grades" page. The sidebar on the left has links for Home, My Courses, Grades, Forums, and Help Center. The main content area displays four grade entries in a table format:

Subject	Date	Grade	Status
METAMORPHOSYMBIOSIS	Today 10:45 AM	9.8	PASS
POTIONOLOGY	Today 10:45 AM	6.2	PASS
SELF DEFENSE	Today 10:45 AM	4.5	FAIL
HISTORY OF MAGIC	Today 10:45 AM	7.7	PASS

A "DOWNLOAD GRADES" button is located at the bottom of the table. The right side of the page features a sidebar with a user profile (Bloom), "NEXT EVENTS" (with a list of upcoming lab submissions and exams), and "LATEST NEWS" (with pixie-related announcements). The footer contains a copyright notice: "© 2020 Alfea Studies".



Hi-Fi prototype of the other members of the team

 COSS SCHOOL □ HOMEPAGE ▼ ABOUT US ▼ HELP ▼ Search  LOGIN/LOG OUT ▼ 



FOR EVERY STUDENT,
EVERWHERE,
THE BEST TEACHERS
AVAILABLE

ALL ONLINE !!



WHY CHOOSE COSS SCHOOL ??

DYNAMIC & CREATIVE LEARNING

Teachers will teach you in the
most dynamic & creative way
possible, by using videos,
games....



TRUSTWORTHY CONTENT

All our teachers have their
certificates, and have gone
through.
All content has been verified by
professionals.

 COSS SCHOOL □ LAST NEWS ▼ ABOUT US ▼ HELP ▼ Search  LOGIN/LOG OUT ▼ 



SUBJECTS

[Mathematics](#)
[History](#)
[Technology](#)
[English](#)
[Literature](#)
[Biology](#)
[History](#)

ADDITIONAL MATERIAL

[Videos](#)
[Extra Material !!](#)

EVERY STUDENT,
EVERWHERE,
BEST TEACHERS
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TRUSTWORTHY CONTENT

All our teachers have their
certificates, and have gone
through.
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professionals.



MATHEMATICS

"The abstract science of number, quantity, and space, either as abstract concepts (pure mathematics), or as applied to other disciplines such as physics and engineering (applied mathematics).

Chapter 1, Numbers :



1.1 Natural Numbers

Add Your solution X

1.2 Whole Numbers

1.3 Integers

1.4 Rational Numbers

1.5 Natural Numbers

Chapter 2, Operations :

2.1 Adition

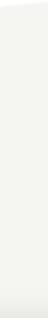


TYPES
OF
NUMBERS



1 2 5
-3/4 4
-5 3

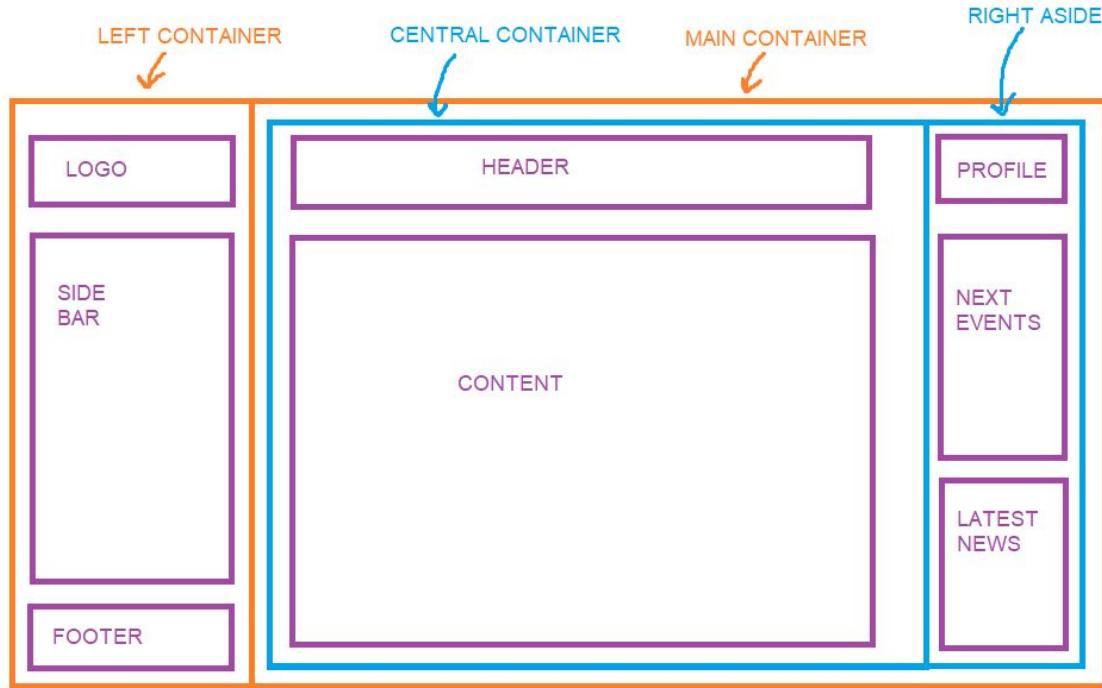
COSS SCHOOL





Justification of the new prototype

Initially, we made a draft of the prototype that we used to organize and design the joint webpage.



Finally, we agreed about combining the ones created by both groups for the third programming exercise. That is, almost keeping the same structure of *Alfea School for Fairies* prototype and including extra functionalities displayed in *Coss School* prototype.

When there are no users logged-in, the shown homepage counts with:

- ❖ Left aside including the title of the website and different navigation sections such as *Admissions, Studies, Research...*
- ❖ Central container including all topics covered in the different courses of *Alfea*.
- ❖ Right aside including the user menu and two static sections: *Next Events* and *Latest News*.

Once you enter the website and you want to make a registration, or you want to sign-up as a student, a pop-up is displayed in the middle of the page.

The left half shows the required information for registering/logging-in and the right half the logo of the website.

When the user has logged-in, the shown page counts with the same information described in the previous part excluding the left aside. Now, it counts with the following sections: *My Courses, Grades and Forums*.



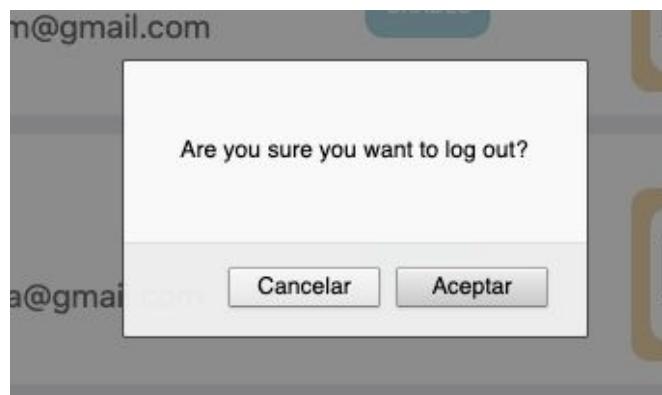
Nielsen's Heuristics justification

1. Match between system and the real world

Our web Page does follow a natural and logical order of the elements and the information represented. It uses the user's language, following real-world conventions, making it familiar for all types of users. We are really interested in users understanding all aspects of our web page and we don't want them to get confused. All the links are organized in a logical way (as we will see later on).

2. User control and freedom

The user can make mistakes and, for instance click on the "logout" button by mistake, if this happens, the user will have a pop up "alarm" asking the user if its sure of the action it has clicked. Below this text, we have an example which we have integrated in our web page. This pop-up will help the user to decide if he is sure about the action is going to do. As we observe, we have used a simple design as the information must be clear.



3. Flexibility and efficiency of use

Alfea works both for inexperienced users as experienced. There is no difference in the interface depending on this factor because even if the user is experienced and uses a lot the platform is not able to customize its frequent actions. The users with more experience will be the teachers, administrators and students which need to access the school webpage daily. For them, there are special options but can be used for new users as well.

4. Aesthetic and minimalist design

The webpage is very user friendly. It contains all the needed information for an online classroom. For instance the grades, a list of the students (in case the user is a teacher), the list of all the courses... It is focused just on the essentials and relevant information and visual design which we consider is the main difference between good interfaces. We don't want users to get distracted from what they really need because of the use of many elements in the design, it is always challenging to keep a minimalist design as in a school website.



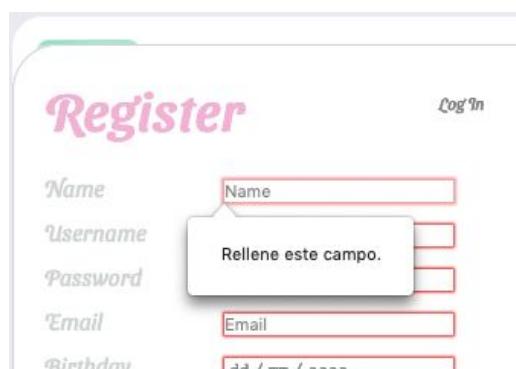
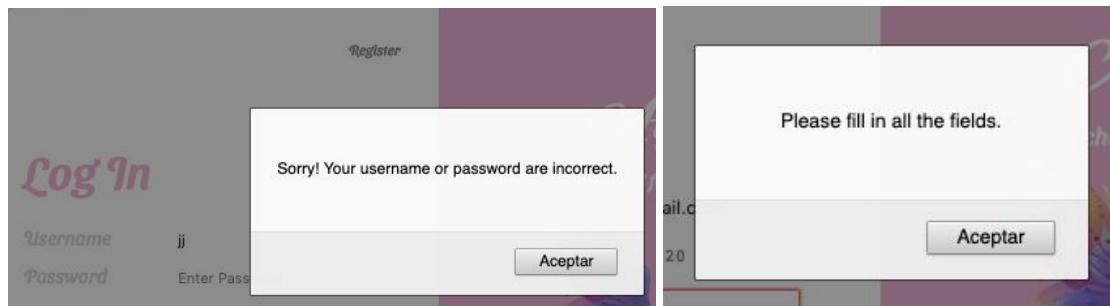
School Life

As an extremely prestigious school for fairies, we pride ourselves in our excellent academia which shapes the future leaders of tomorrow. We have had the pleasure to teach some of the most renowned political leaders, philosophers, scientists and warriors.

5. Help users recognize, diagnose, and recover from errors

Errors may occur, for that reason the system expresses them in plain language, without irrelevant information as we mentioned before, so the user is able to deal with it and don't get confused with error codes, we use visual treatments again.

As you can see in the following images, whenever the user makes a mistake (inserting wrong information, or not inserting all the necessary information, it will pop up an error "alarm").



Van Duyne's Design Patterns justification

1. Multiple ways to navigate

1. We have established all the links on the right part of our website, which will be changing depending on the role.

a. No User Logged in the webPage:

As we can see in the image, everyone that looks at our webPage will be able to see The Home Page, About Us, a help Center and a Site Map, we will also have admissions, and studies.



The screenshot shows the Alfea website's home page. On the left, there is a sidebar with a pink background containing navigation links: Home, About Us, Admissions, Studies, Research, Help Center, and Location. The main content area has a light blue background and features several video thumbnails with titles: School Life, Welcome to Alfea, The Dormitories, Work & Play, Talent Shows, Fashion Shows, and Fairy Forms. Each video thumbnail includes a brief description. To the right of the main content is a sidebar with a light blue background. It contains a 'LOG IN' button at the top, followed by sections for 'NEXT EVENTS' and 'LATEST NEWS'. The 'NEXT EVENTS' section lists events like 'Sunday, 23 November 11:55PM: Potionology - Third Lab Assignment Submission' and 'Thursday, 3 December 11:00AM: History of Magic - Final Exam in room A1.23'. The 'LATEST NEWS' section contains general updates about pixies returning and potionology topics.

b. Teacher Logged in the webPage:

As we can see in the image, the teachers that looks at our webPage will be able to see The Home Page, About Us, a help Center, Site Map, My Class, My Students, the Forum and All Grades of my Students

This screenshot shows the Alfea website's home page from a student's perspective. The layout is identical to the teacher's view, with a pink sidebar on the left and a light blue main content area. The navigation links in the sidebar are: Home, About Us, My Class, My Students, All Grades, Help Center, and Location. The main content area displays the same video thumbnails and descriptions as the teacher's view. The right sidebar also remains the same, showing the 'LOG IN' button and sections for 'NEXT EVENTS' and 'LATEST NEWS'.

c. Student Logged in the webPage:

As we can see in the image, the students that looks at our webPage will be able to see The Home Page, About Us, a help Center, Site Map, My Class, My Students, the Forum and All Grades of my Students



The screenshot shows a student dashboard titled "MY GRADES". On the left is a sidebar with navigation links: Home, About Us, My Courses, My Grades (highlighted), Forum, Help Center, and Location. The main area displays four grade entries:

Subject	Date	Grade	Status
METAMORPHOSYMBIOSIS	Today 10:45pm	9.6	PASS
POTIONOLOGY	Today 17:45pm	4.6	FAIL
SELF DEFENSE	Today 19:45pm	4.9	FAIL
HISTORY OF MAGIC	Today 17:00	6.9	PASS

On the right side, there are two sections: "NEXT EVENTS" and "LATEST NEWS".

NEXT EVENTS

- Sunday, 23 November 11:55PM: Potionsology - Third Lab Assignment Submission
- Thursday, 3 December 11:00AM: History of Magic - Final Exam in room A1.2.3
- Friday, 16 December 11:59PM: Metamorphosymbiosis - Submission of "New power abilities progress"
- Monday, 21 December 9:00AM: Self Defense - Krav Maga Green Belt Exam
- Wednesday, 23 December 2:30PM: General - End of Semester Christmas Party!

LATEST NEWS

- Pixies are coming back to Alfea. Any suggestions for making their visit as remarkable as possible?
- Potionsology's last topic will be covered during the lab session of this week. Do not miss it!
- Final mark of Metamorphosymbiosis is already available. Check it now!
- Want to be a part of a club? Become a member of the feminist club, music club, art club, board games club, etc.

d. Administrator Logged in the webPage:

As we can see in the image, the admins that look at our webPage will be able to see everything a student & a teacher sees.

2. Browsable content

The navigation tools and cues should let the users know where they are, where they can go and how to get back.

a. Task-based Organization.

As we can clearly see from the pictures below, the user knows at all times where he is. And in case it wants to go back to the page before the one that he/she is in, it's as easy as just clicking on the "GO BACK" button.



LOG OUT

MY GRADES

METAMORPHOSYMBIOSIS

Today 10:45pm

Grade

9.6

PASS

Details

POTIONOLOGY

Today 17:45pm

Grade

4.6

FAIL

Details

SELF DEFENSE

Today 19:45pm

Grade

4.9

FAIL

Details

HISTORY OF MAGIC

Today 17:00

Grade

6.9

PASS

Details

NEXT EVENTS

Sunday, 23 November 11:55PM: Potionology - Third Lab Assignment Submission

Thursday, 3 December 11:00AM: History of Magic - Final Exam in room A1.2.3

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LATEST NEWS

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Potionology's last topic will be covered during the lab session of this week. Do not miss it!

Final mark of Metamorphosymbiosis is already available. Check it now.

Want to be a part of a club? Become a member of the feminist club, music club, art club, board games club, etc.

MY COURSES - METAMORPHOSYMBIOSIS

Teacher - Mr Mott



Welcome to Metamorphosymbiosis. This is the first branch of Transfiguration that students will learn at Alfea School of Witchcraft and Wizardry, beginning with Match to needle in first year and progressing from there.

Chapter 1

GO BACK



LOG OUT

NEXT EVENTS

Sunday, 23 November 11:55PM: Potionology - Third Lab Assignment Submission

Thursday, 3 December 11:00AM: History of Magic - Final Exam in room A1.2.3

Friday, 16 December 11:59PM: Metamorphosymbiosis - Submission of "New power abilities progress"

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Wednesday, 23 December 2:30PM: General - End of Semester Christmas Party!

LATEST NEWS

Pixies are coming back to Alfea. Any

3. Creating a powerful homepage

We believe the homepage should be visual and attract the user to the content even if it includes many different sections.

In the case of Alfea, we believe the homepage is attractive to the user due to the images and sections we defined to separate the website.



HOME

School Life
As an extremely prestigious school for fairies, we pride ourselves in our excellent academia which shapes the future leaders of tomorrow. We have had the pleasure to teach some of the most renowned political leaders, philosophers, scientists and warriors.

Welcome to Alfea
Our principal, Ms. Farogonda welcomes you to Alfea and gives you her signature introductory speech.

The Dormitories
As a boarding school, we offer the best accommodation for our students. In the following video, we give you a fun little sneak peak of the rooms

Work & Play
Here at Alfea, we are well aware that it is impossible to just study and we make sure that our students have healthy mix of academia and fun. In the following videos we will show you some of the many activities they can enjoy on campus.

Talent Shows
Our alums all have various types of skills which we love to showcase in our annual Talent Show. Here you can see last years winners, The Winx Club.

Fashion Shows
Our school has various extracurricular clubs, one being Fashion Design. Each term they host a fashion show to demonstrate their latest creations.

Fairy Forms
Fairy forms or transformations are different levels of power that fairies can attain as an extention of their magical abilities. In our school, we work with our students not only to help them become full-fledged fairies, but so that they

LOG IN

NEXT EVENTS

- Sunday, 23 November 11:55PM: Potionsology - Third Lab Assignment Submission
- Thursday, 3 December 11:00AM: History of Magic - Final Exam in room A12.3
- Friday, 16 December 11:59PM: Metamorphosymbiosis - Submission of 'New power abilities' progress
- Monday, 21 December 9AM: Self Defense - Krav Maga Green Belt Exam
- Wednesday, 23 December 2:30PM: General - End of Semester Christmas Party

LATEST NEWS

- Fairies are coming back to Alfea. Any suggestions for making their visit as remarkable as possible?
- Potionsology's last topic will be covered during the lab session of this week. Do not miss it!
- Final mark of Metamorphosymbiosis is already available. Check it now.

4. Writing and managing content

In our Web site design, we are able to manage large amounts of content, by dividing it using containers, and different headers as we can see in the following picture, by using these white containers and the titles (you will see below) we think that we have been able to make our web page really clear and effective for the user.

MY COURSES

Metamorphosymbiosis
It is a type of magic which allows the user to transform into another living being and to transform other things/people into another living being. There are different types of Metamorphosymbiosis.
OPEN COURSE

Potionology
His exciting one and a half hour workshop will see apprentices develop their Potion making skills, engage their imaginations and use talk, reasoning and role play to explore ways to help our character out of his tricky situation. Each apprentice will concoct and take home their own potion in a special, muggle-proof bottle.
OPEN COURSE

Self Defense
As teacher of self defense, Griselda is well-versed in defense magic. As a fairy she may also know first-level spells all fairies can learn such as, telekinesis, transmuting objects, and fixing minor messes.
OPEN COURSE

History of Magic
History of Magic is a core class and subject taught at Hogwarts School of Witchcraft and Wizardry. This class is a study of magical history. This is one of the subjects where the use of magic practically is not necessary.
OPEN COURSE

5. Building trust and credibility

We have a consistent style in "Alfea", the colors used in this website are pink and white, and all the information provided has the same structure (using containers)

The logo of Alfea is the following, which has a good size for the webpage & it is at the left side of the page. (as established in the Van Duyns Patterns)



The screenshot shows the Alfea website's header. On the left is the Alfea logo with a butterfly icon. Next to it is the text "Universidad Carlos III de Madrid" and "Escuela Politécnica Superior". In the center is a pink bar with the text "MY COURSES". To the right is a white bar containing a user icon and the text "student". Below the header, the main content area is titled "Design Choices Justification".

Design Choices Justification

- ❖ We have included our logo on the upper left hand side which we consider to build trust and credibility in our school.
- ❖ We have used a categorical layout so that the user clearly sees the different sections of the website making it as visual as possible.
- ❖ To create a powerful homepage we have clearly displayed what the site is about by including an article called school life and other school related topics.
- ❖ In such topics we include headlines, blurbs and content to create more readability and thus write and manage our content better.
- ❖ To help customers complete tasks we have included the login as a pop-up. The login is not obligatory so that new visitors to the site can use a “guest account” to see all the information available for them about our website without registering as we mentioned above.
- ❖ To give users total freedom when using the webpage, we have included as the first option of the left-side bar the “Home” button in bold typography in order to make it easy to go back to the menu.
- ❖ To make it look like a consistent and standardized website, we use the same terminology in all different sections as well as “X” buttons to undo the last recent action.
- ❖ The website counts with an aesthetically pleasing look, using a very specific color palette: pure white, gray and pink. No clutter at all.
- ❖ “Help Center” section displayed in all different pages, where the user can solve any doubt and view responses to some frequently asked questions.
- ❖ A forum, in which the user can send messages.
- ❖ A “Location” section, which tells the user the location of all our schools.
- ❖ From the point of view of the students all the different courses are inside a bigger section called “my Course”.



Functionalities implemented

Depending on the role we are using:

1. As the Teacher
 - a. Can edit the students grades
 - b. Can view all the students
 - c. Can edits its personal course
 - i. When editing its personal course, the teacher just has to click on “edit” and some buttons will appear on the screen, which will allow the teacher to erase the contents of the course.
 - d. Can download pdfs in “My Course”
 - e. Can upload different material in “My Course”
 - f. View a student’s grades.
2. As the Administrator
 - a. The admin can view the web page from all points of view (as a teacher and as a student)
3. As the Student
 - a. Can select the degree (Psychology, Bio-Healing, Potionological Science)
 - b. Can download pdfs of a subject
 - c. View personal grades under the “Grades” section on the left aside.
 - i. And click on details to see the different grades they got on the activities (the student will be able to close those details)
 - d. Interact with other students through various communication channels such as the forum, chat, etc.
 - e. View the activities displayed under the “Next Events” section on the right aside.
 - f. View all the studies and the research



g. Access to its personal courses

- i. And click on the open course to see the teacher, the introduction about that specific subject, view all the chapters and download material as well as upload projects.

Technology used for the implementation

In order to develop the design and functionalities required for this case study, we have used the following services/applications:

- ❖ Google Drive: working cooperatively on this memory.
- ❖ GitHub: sharing code at any time and with the possibility of being updated without needing to send any minor modifications to each of us.
- ❖ Mozilla Firefox browser: testing the website.
- ❖ Visual Studio Code: programming using the following technologies: HTML5, CSS and JavaScript.
- ❖ W3Schools Validator: attending warnings and solving errors in order to strictly follow the conventions of HTML5.

Conclusions

Working on this case study has been absolutely challenging. We have almost faced a real problem consisting of designing and implementing an educational website. It has been harder than expected since the new functionalities added took too much time.

Our web design's skills have increased exponentially and we have learned a lot. We would perform another case study without a doubt.