ALEXA SKILL WAKE ON LAN

Third Increment

Integrantes:

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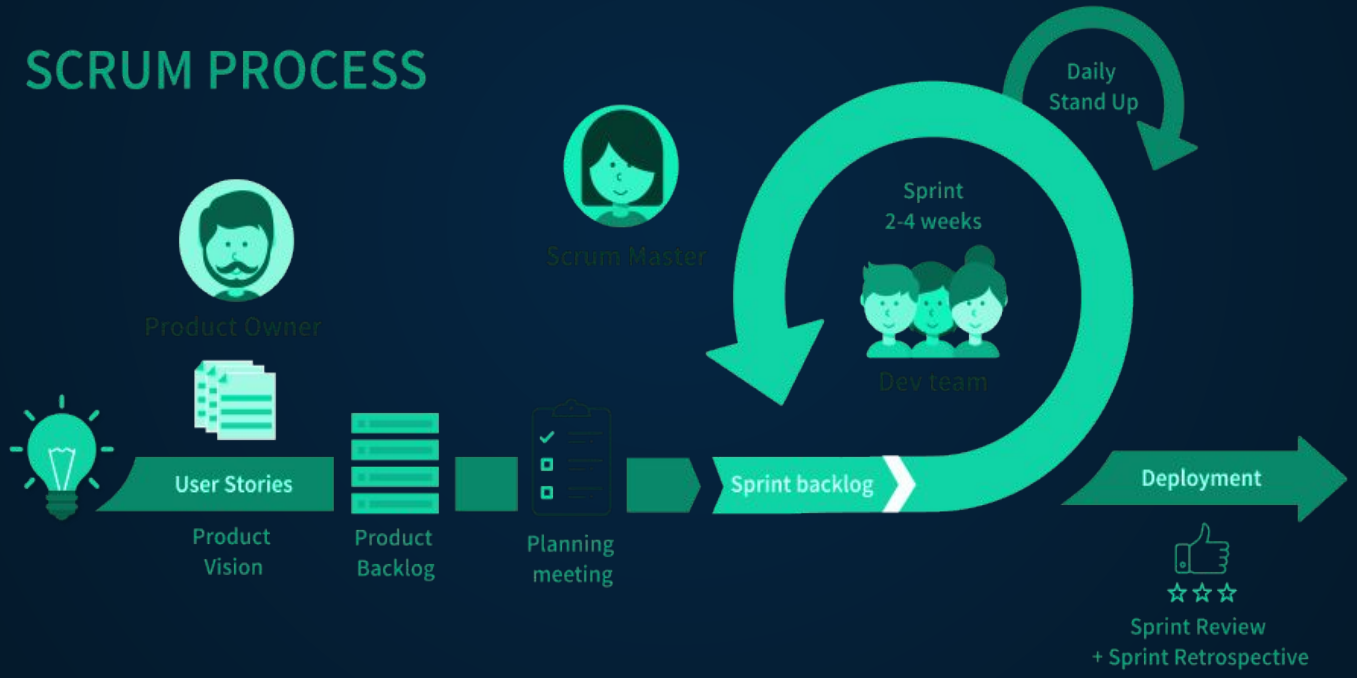
Our project

We implement in Amazon Alexa, through the skill store, the use of WoL (Wake on Lan) protocol to remotely turn on and off all the compatible devices, automatically using only voice.

ORGANIZATION

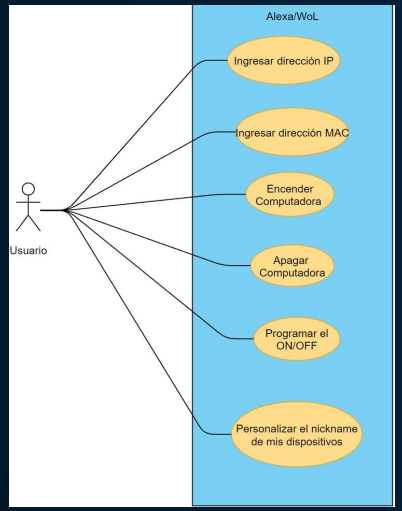
PROJECT PLANNING



PROJECT STAGES

REQUIREMENT PHASE

User Stories



US001: As an Alexa user, I want to be able to automate the on/off of my computer to be more efficient. (M)

US002: As an Alexa user, I want to be able to turn on my computer from another location so I can make more use of my time. (M)

US003: As an Alexa user, I want to be able to control other devices such as televisions to have more control over all my devices. (S)

US004: As an Alexa user, I want to have instructions to help me to be able to implement the skill. (S)

US005: As an Alexa user, I want to schedule a power-on time so that my devices are coupled with my routine and I can make the most of my time. (C)

US006: As an Alexa user, I want to be able to customize the name to devices so that controlling them is easier. (C)

US007: As an Alexa user, I want to control multiple devices for more control and convenience. (C)

US008: As an Alexa user, I want to be able to ask questions within the comments area of the skill to help me solve my doubts. (W)

Requirements

FR001: The skill will be able to control the on/off options of compatible devices. (M)

(NFR001): The user will be able to control the skill from any Alexa-enabled device. (M)

(NFR002): The user can specify the type of action to be performed. (M)

FR002: Implement, through Microsoft Azure services, a web application where the IP/MAC addresses of the devices will be entered. (C)

(NFR003): The Azure platform will notify the developers of any error. (C)

(NFR004): Only developers have access to the database/platform. (M)

(NFR005): The user will have to log in with their Amazon account. (M)

FR003: Implement, through the web application, a bot wizard to help the user enter the IP and MAC address. (S)

(NFR006): The bot will assist by means of a tutorial, the way in which the corresponding addresses should be entered. (C)

(NFR007): As a "pop up" the bot will issue a message in case of entering a wrong IP/MAC address. (W)

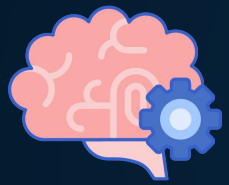
FR004: There will be a tutorial to show users how to initialize the Alexa skill. (S)

(NFR008): The tutorial will be opened automatically when the user indicates the corresponding addresses. (C)

M o S C o W

Requirement Redesign

FR002: Implement, through Microsoft Azure services, a web application where the IP/MAC addresses of the devices will be entered.



FR002: Develop a web application where the MAC address of the devices will be registered.

FR003: Implement, through the web application, a bot wizard to help the user enter the IP and MAC address into the database.

FR001: The skill will be able to control the on/off options menu of WoL protocol compatible devices through the Alexa assistant.

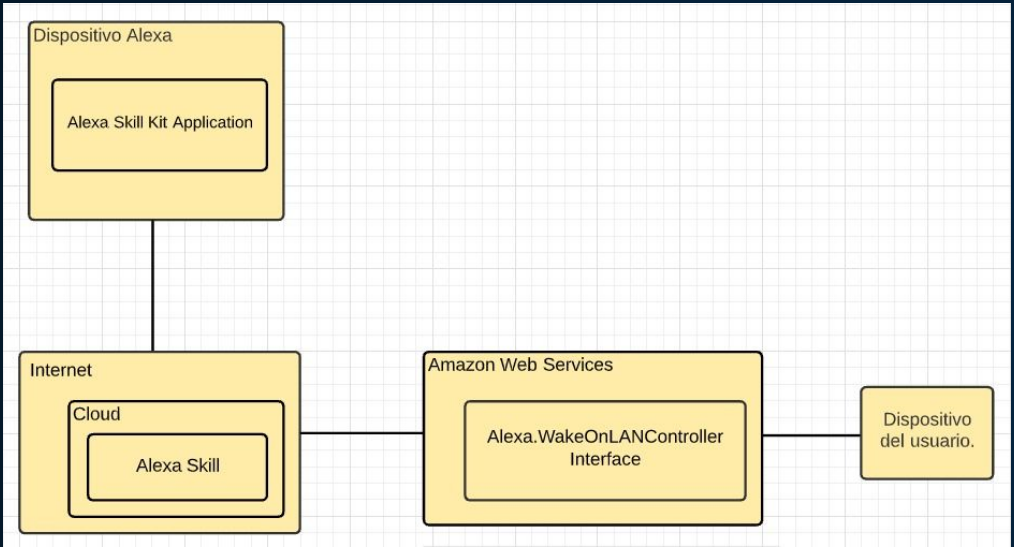
- **(NFR001):** The user will be able to control the skill from any Alexa-enabled device.
- **(NFR002):** The user can specify the type of action to be performed: startup, shutdown, sleep, restart and hibernate.

FR002: Develop a web application where the MAC address of the devices will be registered.

- **(NFR004):** Only developers have access to the database/platform.
- **(NFR005):** The user will have to log in with their Amazon account to link their data with Alexa.
- **(NFR006):** There will be a tutorial on how to find and register the Mac address.
- **(NFR007):** There will be a tutorial to show users how to initialize the Alexa skill inside their devices.

DESIGN PHASE

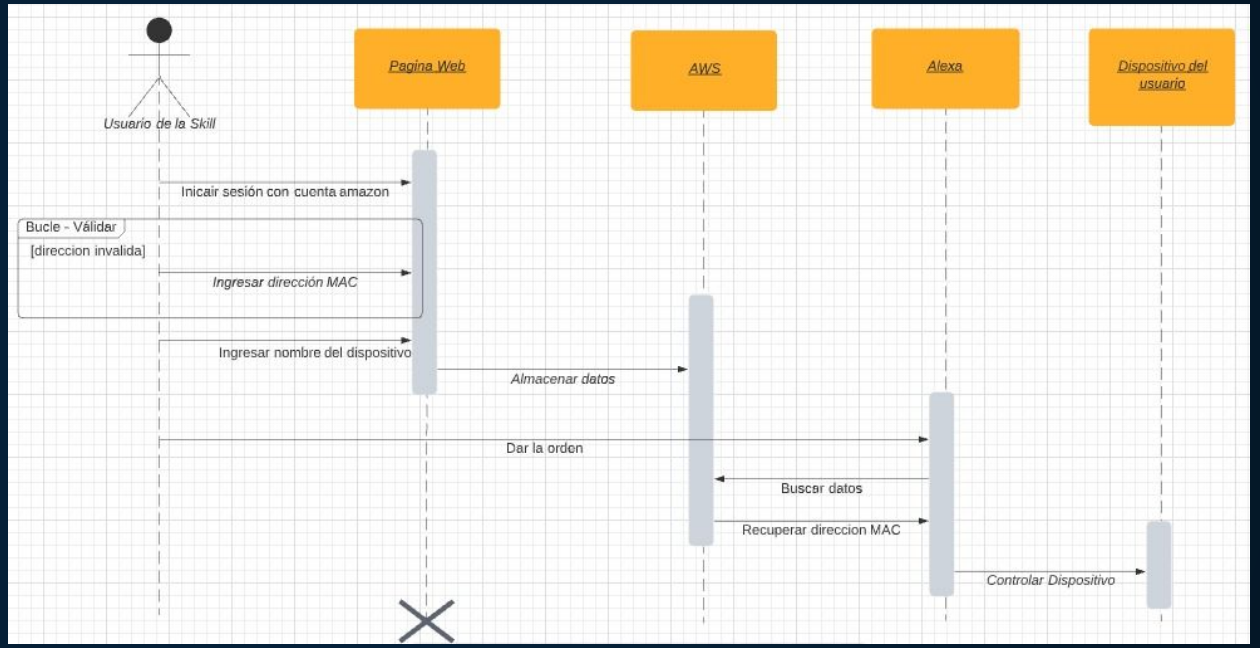
DEPLOYMENT DIAGRAM



This diagram shows how hardware and software interact with each other to work properly.

SEQUENCE DIAGRAM

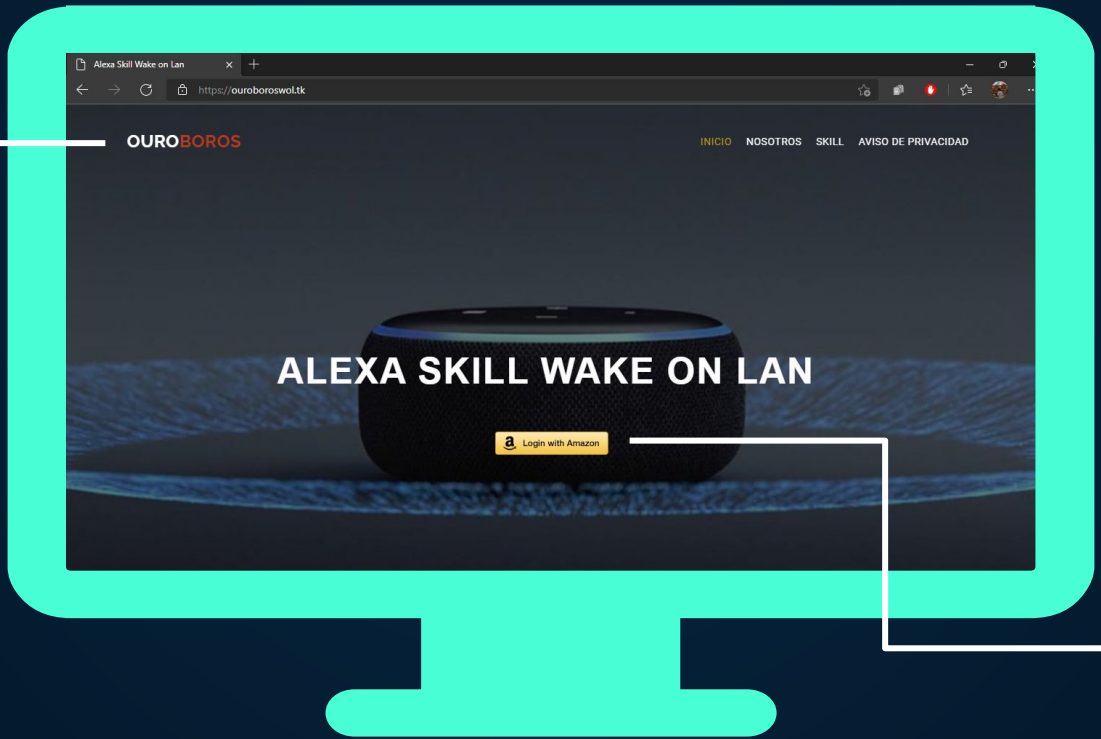
This diagram intentions is to display the expected interaction between the user and the different sections of our product



IMPLEMENTATION PHASE

HOME PAGE

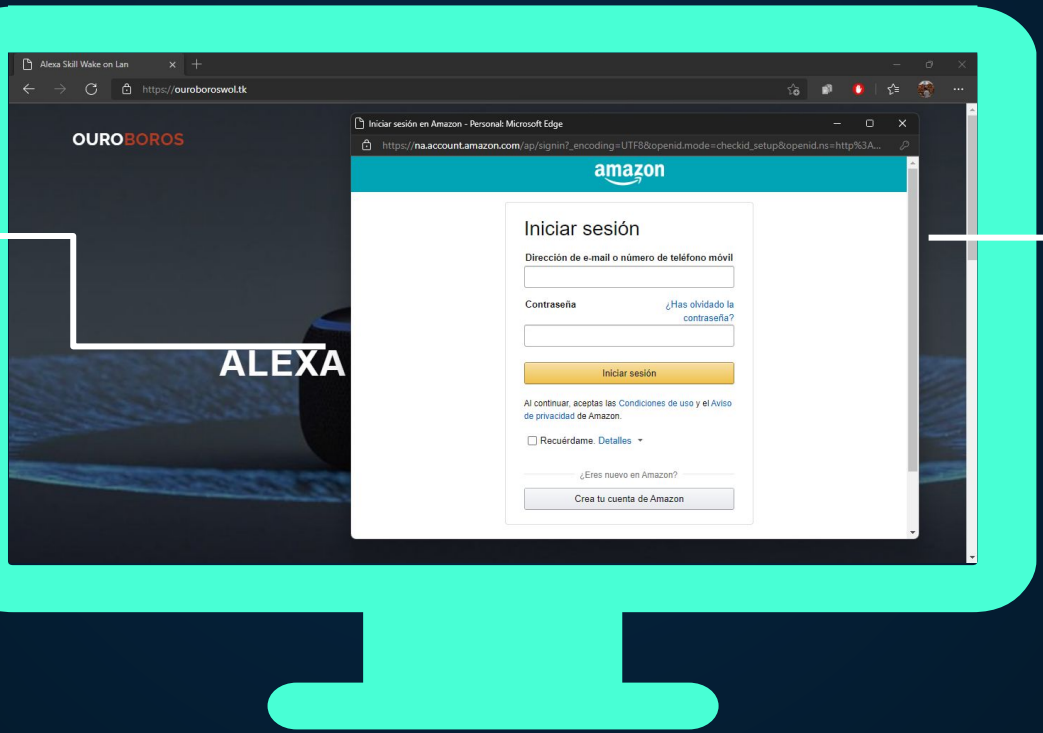
HEADER



Login

LWA

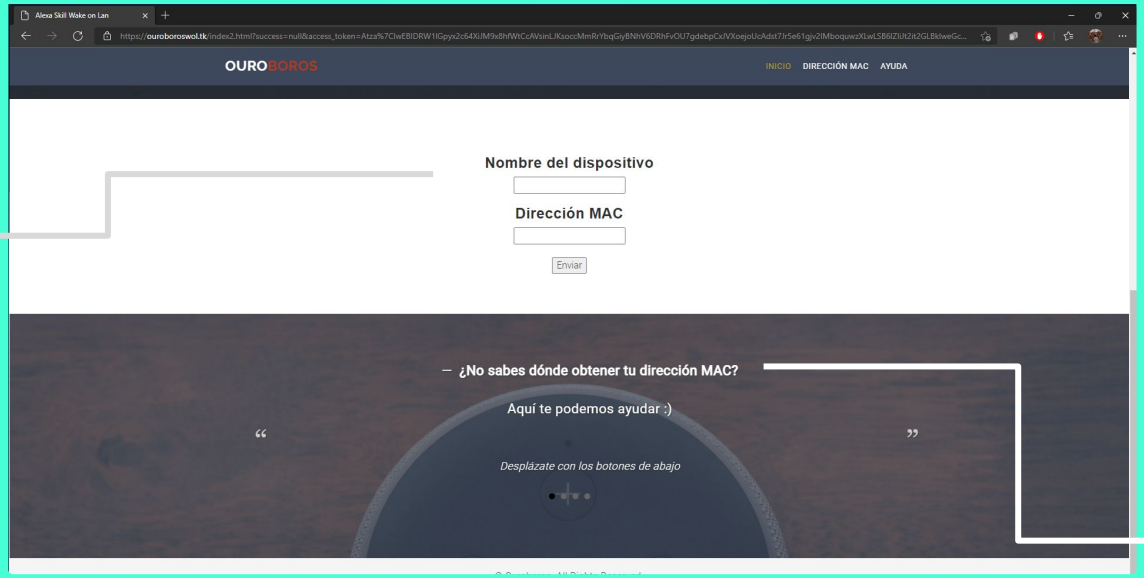
Login With Amazon is a service provided by Amazon



SAFE LOGIN

Directions & Help

DATA



Tutorial

Testing Phase

Login Module

We tested the login module given the LwA (Login with Amazon) interface to access to customer profile information

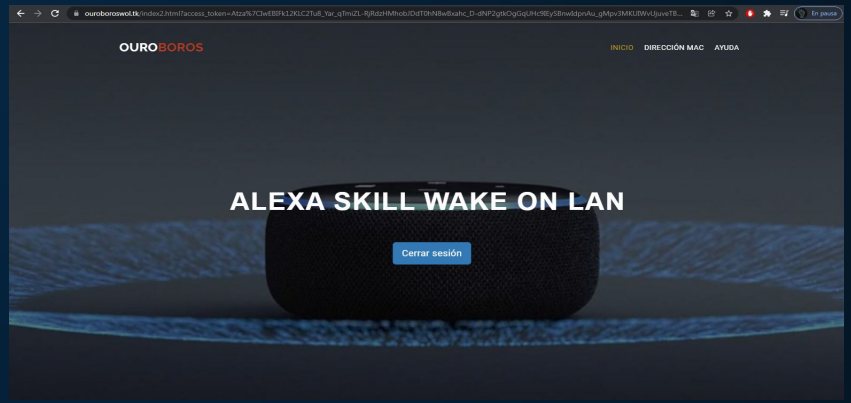
1

Module without test code:

```
<script type="text/javascript">
 document.getElementById('LoginWithAmazon').onclick = function() {
      options = {}
      options.scope = 'profile';
      options.scope_data = {
          'profile' : {'essential': false}
      };
      amazon.Login.authorize(options,
          'https://ouroboroswol.tk/index2.html');
      return false;
 };
</script>
```

2

The module returns to index2.html with the unique access token and its attributes.



Test code

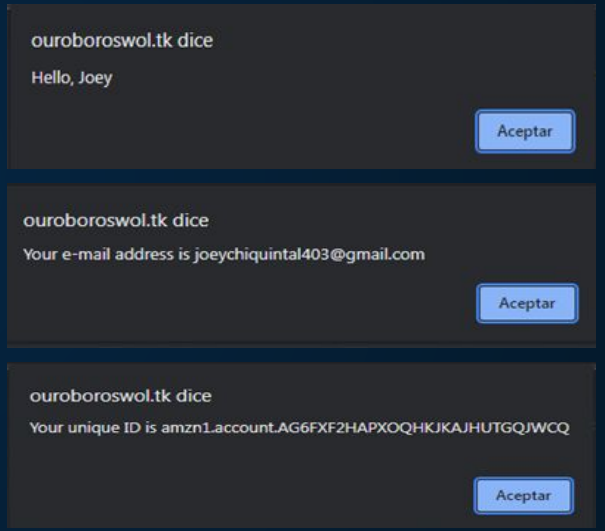
1

Test code that replaces the previous code:

```
<script type="text/javascript">
  document.getElementById('LoginWithAmazon').onclick = function() {
     setTimeout(window.doLogin, );
     return false;
  };
  window.doLogin = function() {
      options = {};
      options.scope = 'profile';
      options.pkce = true;
      amazon.Login.authorize(options, function(response) {
          if ( response.error ) {
              alert('oauth error ' + response.error);
          return;
          }
          amazon.Login.retrieveToken(response.code, function(response) {
              if ( response.error ) {
                  alert('oauth error ' + response.error);
              return;
              }
              amazon.Login.retrieveProfile(response.access_token, function(response) {
                  alert('Hello, ' + response.profile.Name);
                  alert('Your e-mail address is ' + response.profile.PrimaryEmail);
                  alert('Your unique ID is ' + response.profile.CustomerId);
                  if ( window.console && window.console.log )
                      window.console.log(response);
              });
          });
      });
  };
</script>
```

2

Output data within the web app:



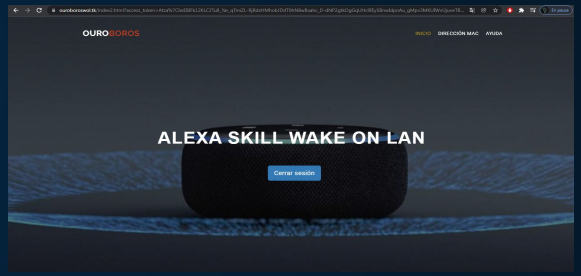
Logout Module

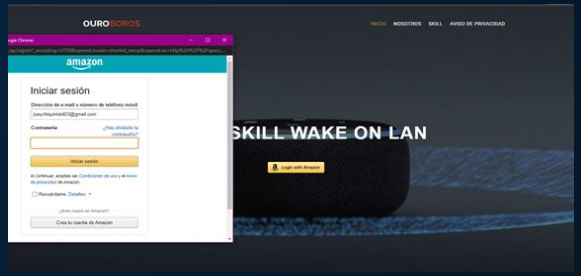
In this time we tested the logout module given attribute "amazon.login.logout" this attribute was used to clear the cache of the Amazon account from the page and return to index.html

1 **Logout interface:**

```
<script type="text/javascript">
  document.getElementById('Logout').onclick = function() {
  amazon.Login.logout();
  window.location.replace('/index.html');
  };
  </script>
```

2 **If you want to access again, you should login with you Amazon account.**





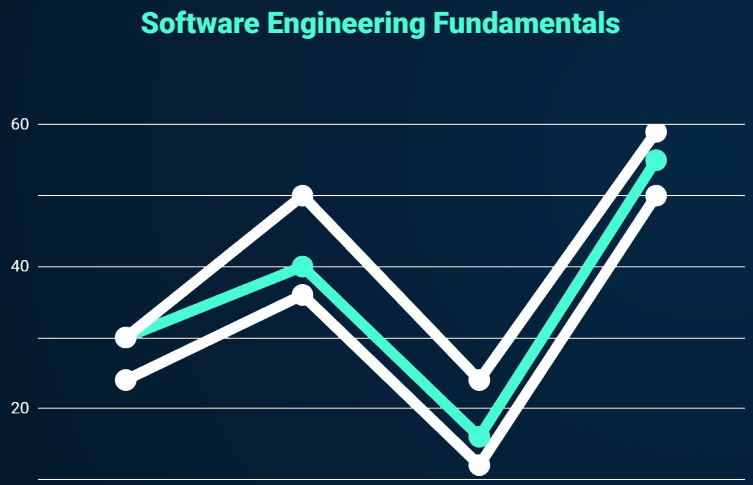
Contribution Tracker

- Activities tracker.
  - Completed activities. → 10%
- Importance of each activity. (1-3)
  - Average according to relevance. → 55%
- Performance of each activity. (1-5)
  - Average according to performance. → 30%
- Attendance percentage to the group meetings. → 5%
- In a table we count the weighting of each item.
  - Make a cross multiplication to obtain the contributions based on 20% for each member.

Contribution Tracker

Accountables	Assigned tasks				Attendance to meetings and weekly stand-ups	Contribution Percentage	
					Number of meetings: 12	Based on 100%	Based on 20%
	Total	Completed	Average according to relevance	Average according to performance	Attendance		
Diego Alamilla Osorio	6	6	2.16	4.66	12/12	97.5%	19.5%
Pablo Gamboa Nieto	8	8	2.12	4.75	12/12	97.1%	19.42%
Abraham Raymundo Cruz Colli	8	8	2.12	4.62	12/12	96.27%	19.25%
José de Jesus Chi Quintal	10	10	2.5	4.8	12/12	106.71%	21.34%
Diego Francisco Arreola Hernández	9	9	2.33	4.77	12/12	102.36%	20.47%
Ponderación de los rubros	-	10%	55%	30%	5%	-	Out of 100%

Conclusion



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First contact with a software development process.

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Getting related to Scrum methodology and project management tools.

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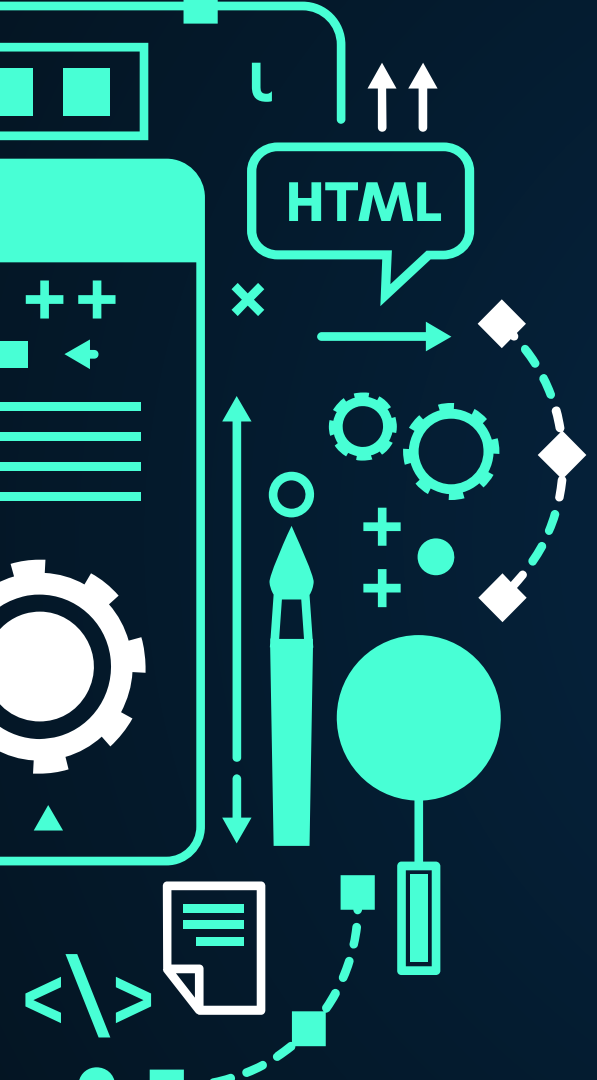
Learning about github and taking advantage having a repository for our project.



THANKS!

Does anyone have any question?

ouroborosowol.tk