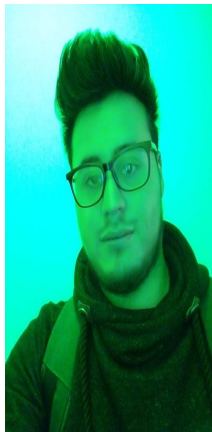


The interactive solar probe



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Summary

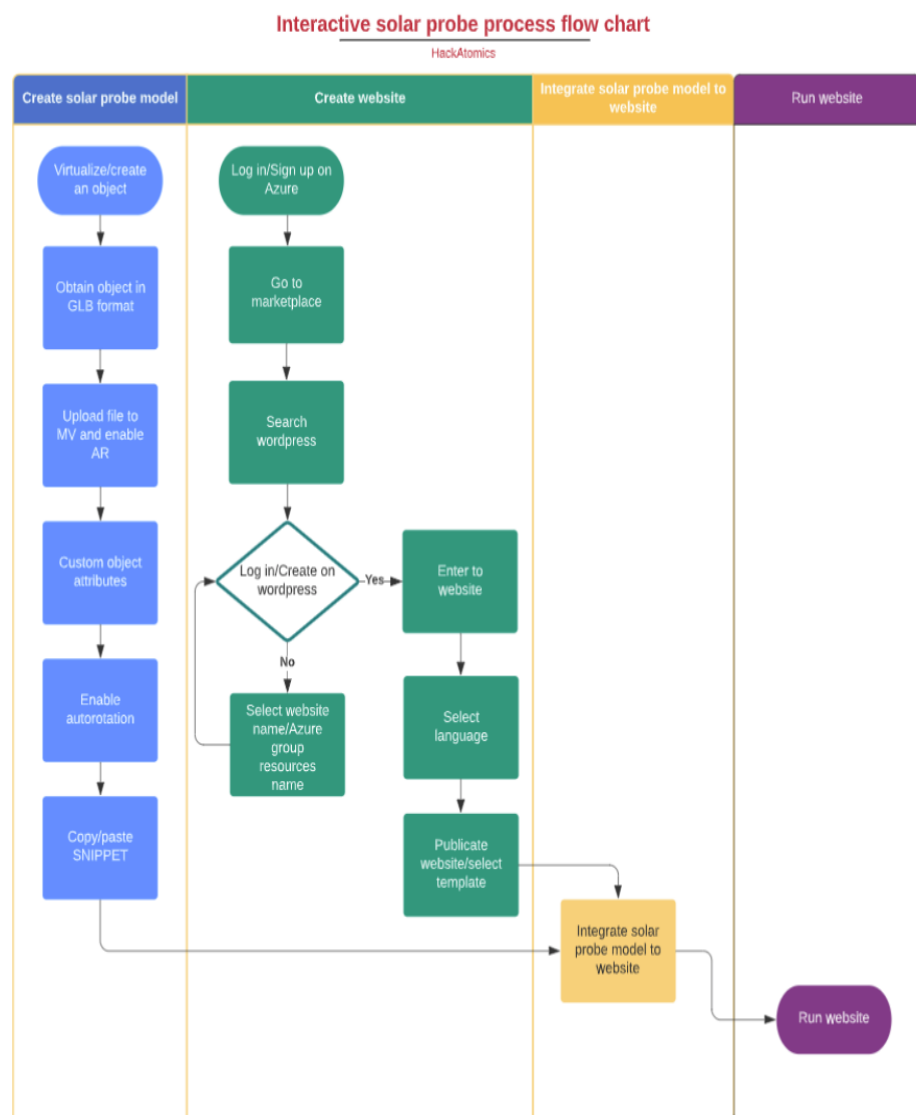
A web page was created where the information from the Parker Solar satellite is presented. On this page you can see a 3D model of the satellite with which you can interact with the cell phone to see it in an augmented reality, there is also information that explains all the use of this satellite.

Development

The project began with a brainstorming session on how we could begin to carry out the project, for this it was to propose what had to be done, so that once from this we began to divide what was his realization.

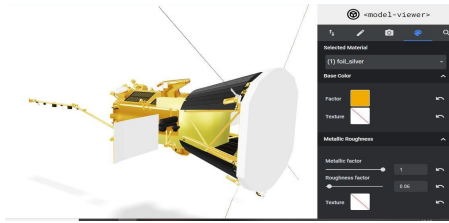
Explanation of the diagram

The diagram shown on the side, was made to see the steps to follow for each element that needs to be done for that project, in this we can see the steps to follow in the 3D model, the decisions that are made when creating a web page, the step that was made on the website and reaching the last step when the website is already up and running.



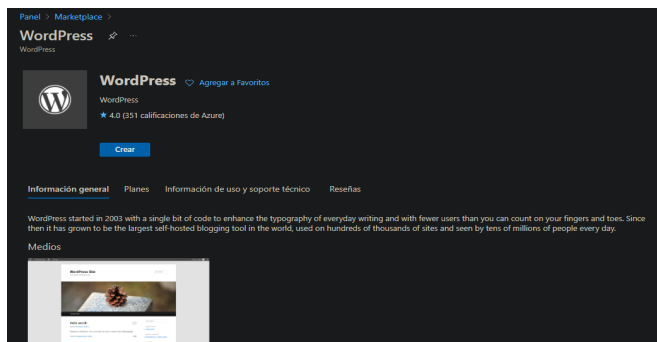
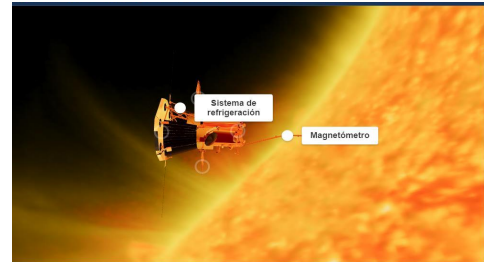
Explanation of the 3D model

It was thought of a 3D model to call people's curiosity to learn, interact and have the curiosity to want to know more, with that idea the modeling began.



In the image on the left side we can see one of the tests that were carried out on the Parker Solar satellite model. After several tests, it was possible to make a model of the Parker Solar satellite with colors that help to simulate that it is in space.

In this other image we can see how we already have the satellite with some of the descriptions that Parker Solar has of the same satellite. It can be seen that these types of interactive models call our attention to learn to interact and be more curious.



Explanation of the website:

The first thing that was done was to take the resources of Microsoft Azure to be able to open WordPress later, as in the image that is on the side to start performing the steps to follow to start creating a web page.

In the image below we can see the requirements that are needed to create the web page and what we have selected for the subscription, resource group, data providers, App Service / Location plan, Database and Application Insights



spaceapps1-mysqldbserver

Nombre de inicio de sesión del administrador del servidor *

mysqldbuser

Contraseña

Escribir contraseña

Confirmar contraseña

Confirmar la contraseña anterior

Versión *

5.7

Plan de tarifa

Uso general, 4 núcleos virtuales, 1...

Nombre de la base de datos *

mysqldatabase64

Aceptar

In this image we can see the specifications of the databases and the selection we made in the Login name, password, password confirmation, the version to use, the rate plan and the name of the database that we will use.

At the end of these steps we can begin with the edition of the web page, that is to say, the view of the funds, the interaction, the information that we come to see in it.

In the image below we can see some of the sections that a web page has, some examples: they are the title, the titles of the bar or of the other pages, etc.

It is also possible to observe the hours of the last modification that was made in each section.

<input type="checkbox"/> Título	Autor		Fecha
<input type="checkbox"/> Acerca de	A	—	Publicada hace 2 horas
<input type="checkbox"/> Blog — Página de entradas	A	—	Publicada hace 2 horas
<input type="checkbox"/> Contacto	A	—	Publicada hace 2 horas
<input type="checkbox"/> Inicio — Página de inicio	A	—	Publicada hace 2 horas
<input type="checkbox"/> Página de ejemplo	A	—	Publicada hace 3 horas
<input type="checkbox"/> Política de privacidad — Borrador, Página de política de privacidad	A	—	Última modificación hace 3 horas
<input type="checkbox"/> Sabías Que?	A	—	Publicada hace 16 min
<input type="checkbox"/> Una sección de la página de inicio	A	—	Publicada hace 2 horas
<input type="checkbox"/> Título	Autor		Fecha

Explanation to the public:

For this project, what is the realization of a web page was carried out in which users who access it will be able to interact with the Probe which was created in order to be able to have an approach to everything that is provided of information about our solar system and its secrets.

It is of the utmost importance that the method of using our page is simple and straightforward since being for open public, anyone who has that tickle of knowing what a satellite in orbit is like, has no problems with using it and on this it is easy to interact.

In addition to this, we plan that the information that NASA updates every day, be used on our website in order to have greater credibility regarding the data used for the development of this 3D satellite prototype in virtual reality.

To delve into the subject a bit, we will begin by defining what we will work with.

Parker Solar Probe, launched in 2018, moves in an elliptical orbit. The goal is to make the spacecraft fly through the corona at a distance of 9.5 solar radii. Primary science operations are performed when the spacecraft is within 0.25 astronomical units (AU) from the Sun, so part of the orbit is colored red. The nominal end of the mission for Parker Solar Probe is 2025, so the orbit vanishes after that year.

Parker has traveled closer to our star than any man-made object before. Early results from NASA's Parker Solar Probe show flips in the direction of the magnetic field, flowing from the Sun, embedded in the solar wind and detected by the FIELDS instrument. These setbacks can provide early clues as to what mechanisms heat the solar corona and accelerate the solar wind.

Twists in the Sun's magnetic fields, dubbed "switchbacks," last from a few seconds to several minutes as they flow over NASA's Parker solar probe during its first year in orbit. However, they appear not to be present further from the Sun.

NASA's Parker Solar Probe observed a slow solar wind, scientists have long known that fast solar wind currents flow from coronal holes near the poles, not yet have conclusively identified the source of the Sun's slow solar wind. New results from NASA's Parker Solar Probe have observed for the first time how dust begins to thin near the Sun, evaporating in the intense heat.

Parker's ISOIS energetic particle instruments have measured several never-before-seen events so small that all trace of them is lost before they reach Earth. They have also measured a rare type of particle explosion with a particularly high proportion of heavier elements, suggesting that both types of events may be more common than scientists previously thought.

Links to see the project: [Contact - SECRETS OF THE SUN](#)

References

- <https://2021.spaceappschallenge.org/challenges/statements/unlocking-the-secrets-of-the-sun/resources>
- [https://svs.gsfc.nasa.gov/search/? chunk = 1 & release_date_gte = & release_date_lte = & search = parker% 20solar% 20probe & sort_by = relevance](https://svs.gsfc.nasa.gov/search/?chunk=1&release_date_gte=&release_date_lte=&search=parker%20solar%20probe&sort_by=relevance)
- <https://svs.gsfc.nasa.gov/12946>
- <https://svs.gsfc.nasa.gov/13484>
- [https:// svs.gsfc.nasa.gov/13484](https://svs.gsfc.nasa.gov/13484)
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