

Software engineering impact in aerospace

Investigation

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Sustainable cities and communities

About this objective

This objective tries to find a solution to the problem of increase in the world's population. For this, some actions are proposed: building modern, sustainable and resilient cities and implementing intelligent urban planning.

Targets

- Safe and affordable housing.
 - ◆ By the end of 2030, there will be access for all to adequate, safe and affordable housing and basic services and upgraded slums.
- Affordable and sustainable transport system.
 - ◆ By the end of 2030, there will be access to safe, accessible and sustainable transport systems for all, also improving road safety.
- Inclusive and sustainable urbanization.
 - ◆ By the end of 2030, there will be an enhanced inclusive and sustainable urbanization and open for participation.
- Protect the world's urban and natural heritage.
 - ◆ By the end of 2030, there will be a strengthened effort to protect the world's natural and cultural heritage.
- Reduce the adverse effects of natural disasters.
 - ◆ By the end of 2030, there will be a significant reduction regarding the number of deaths and the number of people affected, in addition to a decrease to direct economic loss on domestic products caused by disasters.
- Reduce the environmental impact of cities.
 - ◆ By the end of 2030, there will be a reduction in the adverse per capita environmental impact of cities.
- Provide access to safe and inclusive green areas and public spaces.
 - ◆ By the end of 2030, there will be universal access to safe, inclusive and accessible, green and public spaces.
- Strong national and regional development.
 - ◆ There will be a bigger support to positive economic, social and environmental links between urban, peri-urban and rural areas.

- Implement policies for inclusion, resource efficiency and disaster risk reduction.
 - ◆ By the end of 2020, there will be a substantial increase in the number of cities and human settlements adopting and implementing policies and plans regarding inclusion, resource efficiency, mitigation and adaptation to climate change and other similar disasters.
- Support the least developed countries in sustainable and resilient building.
 - ◆ There will be an increase in the support towards least developed countries regarding the financial and technical assistance.

Things to do

- Make a donation to one charity.
- Consume local products.
- Use a bike, walk or take the bus to go to close places.
- Stay informed with the latest news.
- Support a project in slums for safe housing.
- Go to the local elections.
- Take care of public spaces.

What should we do as software developer engineers?

Our role

We can help to develop and implement new technologies to make an intelligent system for smart cities. For example, in the 11.2 target, we can implement big data to know where the most density of people in the city is and then, introduce new infrastructure that helps the mobility in that part of town and improves the lifestyle.

Another example could be the implementation of an infrastructure of security cameras along the city. This system can use facial recognition software that can help us find potentially dangerous people, so we can ensure the safety of public spaces, as is sought in the 11.7 target.

Outcomes

For the 11.2 target, it could be used to make the urban transport in the slums efficient and help them to get close to the city and be a part of it.

For the second example, one of the outcomes could be the improvement of the security of the city, because the policial elements can respond more effectively.

Conclusions

Owen Jesús Enríquez Ascenciós conclusion

Personally, I believe that it is necessary to implement new technologies that allow us to develop new urban projects so that everyone can have decent housing. This of course includes the necessary infrastructure to be able to ensure people's quality of life, which we can design based on mathematical models processed with specialized software.

Jonathan Guillermo Díaz Magallanes conclusion

Software developers are a major key in the development of each of the sustainable development objectives, especially regarding the sustainable cities and communities objective since the technologies can enhance the productivity and efficiency of the tasks needed to be fulfilled.

Miguel Sosa Guardado's conclusion

I think that technology can be useful in this aspect because with it we can analyse data related to the population in an area and its behaviour. In this way we can create models to implement new infrastructures that can improve the living conditions.

Juan Pablo Cruz Martínez's conclusion

It's important to think about the slums because sometimes they are forgotten by the government and don't look for them in their necessities, so we as a community can help them by donating to charity or volunteering to build houses.

Bibliography

- Goal 11: Sustainable cities and communities. (2022, 15 marzo). The Global Goals. Recuperado 7 de octubre de 2022, de <https://www.globalgoals.org/goals/11-sustainable-cities-and-communities/>