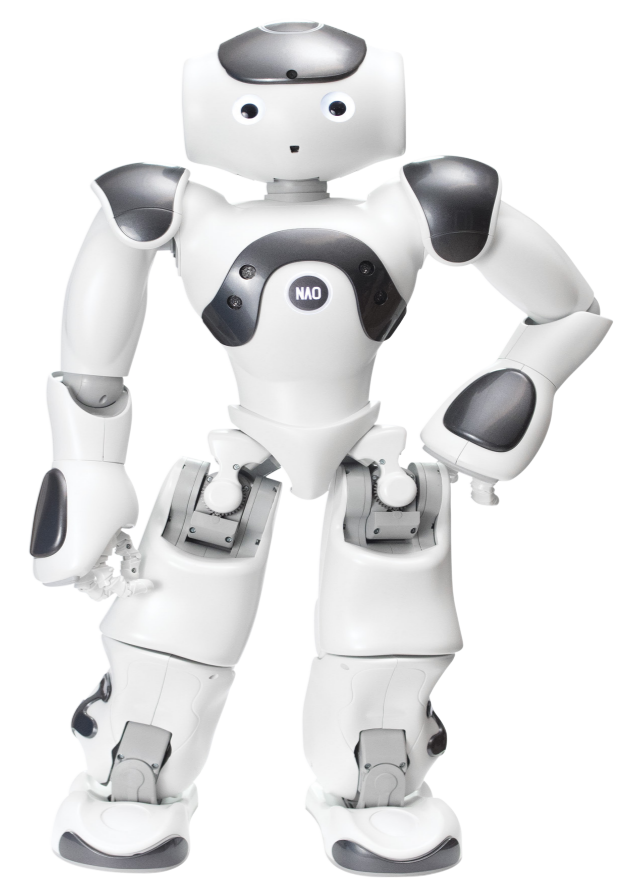


Alan the Astro Aide - a digital assistant in space -

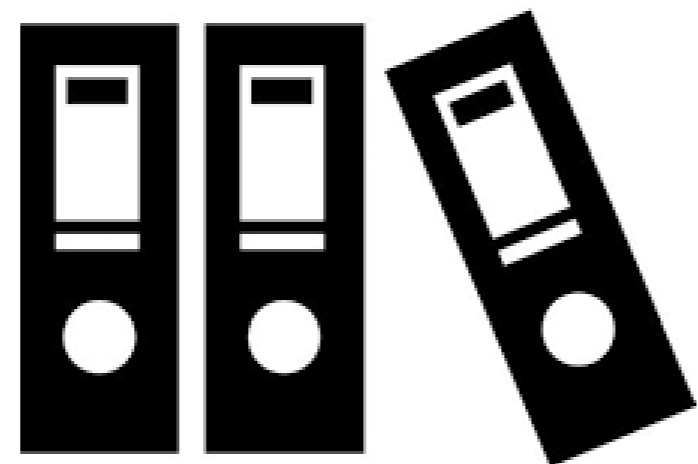
- Astronauts who work on the International Space Station (ISS) are operating with diverse types of technology.
- One important part of the equipment on the ISS is the European Physiology Modules (EPM) from OHB.



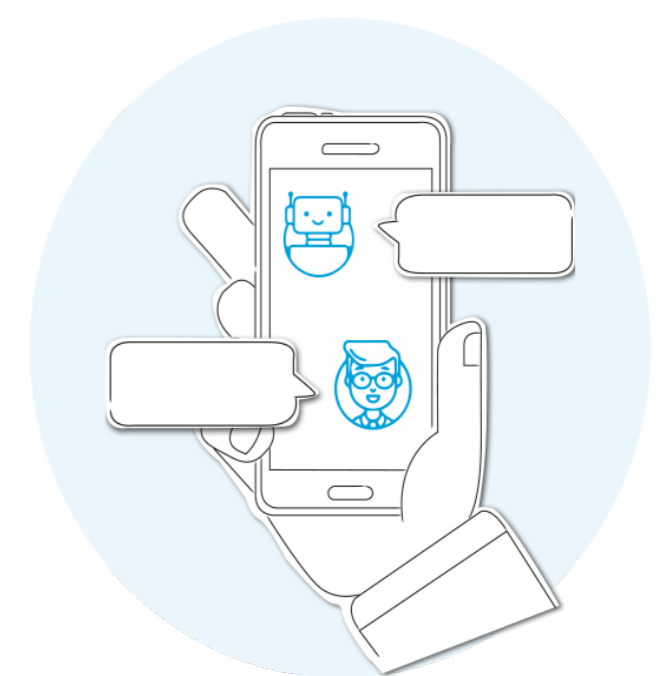
- Therefore digital assistants can make an important contribution for spaceman.
- This is why we invented *Alan the Astro Aide* to upgrade work in space for them.



- Although the devices were built for heavy stress in space, there is a risk of failures.
- At the moment there are many manuals for the potential problems of the installed modules.
- One copy of these manuals is located on the ISS and another on the ground station.



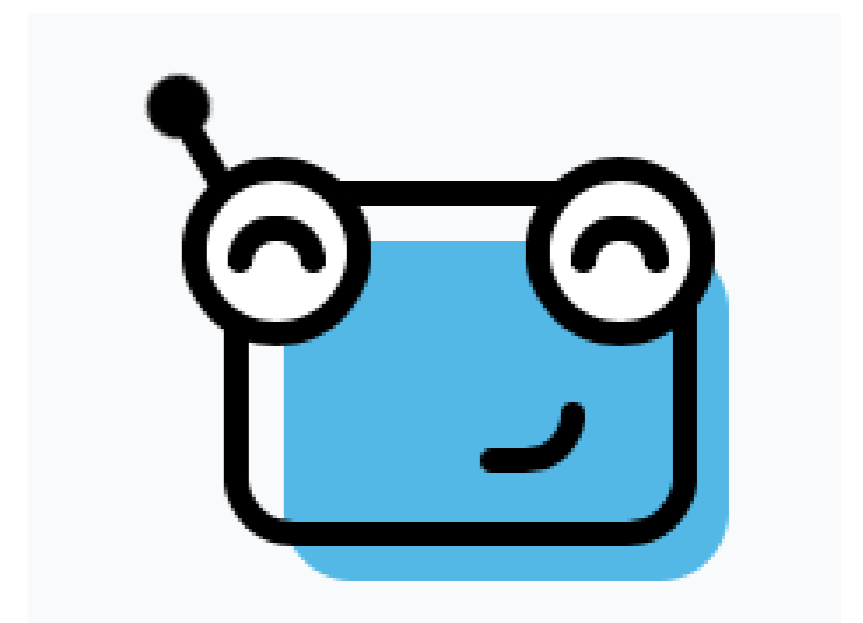
- *Alan the Astro Aide* is a btNexus based assistant, who can be used as a chatbot.
- He has the knowledge to solve different kinds of EPM problems.
- He only needs seconds to answer his user.
- Astronauts can count on *Alan the Astro Aide* 24/7.



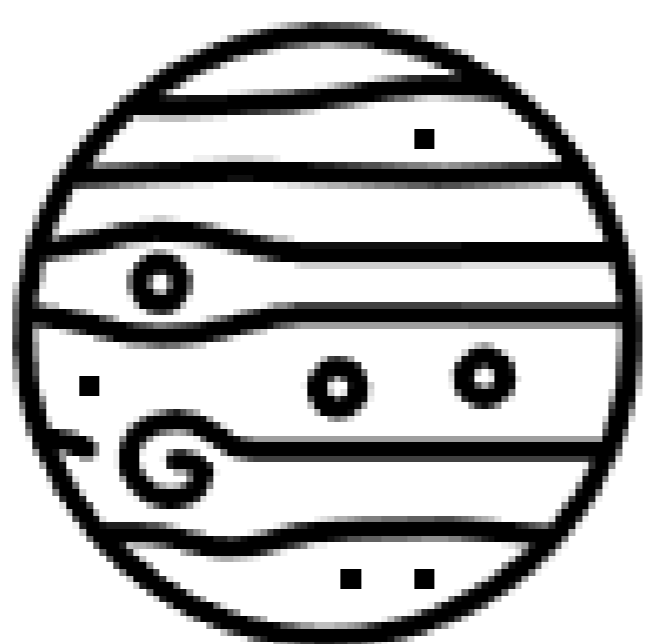
- Another difficult aspect in communication with the ground stations are time delays.
- It is a result from the distance of more than 400 km between the ISS and earth.
- This delay is a time span of about 30 seconds each way.



- *Alan the Astro Aide* is a very analytical and target-aimed personality.
- He efficiently leads users through procedures.
- Using buttons and pictures, *Alan the Astro Aide* guides the astronaut.



- Experts calculate with min. 14 minutes one-way-delay for future Mars missions.
- A total loss of signal can occur if a solar panel obstructs the signal between both receivers.



- In future new problems/modules can be added easily to the knowledge sources.
- A modification of the chatbot can be done a lot easier than a reprint and replacement of the entire manual.

