

# VIRTUAL ESA SPACE APP CAMP 2021

# 20 July – 20 September 2021

#### Welcome to the Space App Camp!

Here you will find information about the App Camp learning content: what you will achieve as a result of the participation to the ESA Space App Camp, and how you can use it for your optimal personal and professional growth.

Our training and development program is based on the principle that every training session will be adapted to Participants individual level of skills, experience and attitude.

#### **Program Description**

The Space App Camp program will require your online participation twice or maximum three times a week for appr. 1,5 hrs in the period from July 20 to September 20.

### Book today your Tuesdays and Thursdays (17.30-19.30)

We are ready to accommodate all Participants' schedules, regardless if you are on a summer break from your university or partake as a busy professional! The mentoring slots can take between 30 min and 1 hr depending on your requirements and needs. The flexibility is our key asset: all teams will enjoy the same maximum 4:1 student teacher ratio that is matching the right level of your technical proficiency. In addition, our mentors will be on call to support your development process and help you progress when needed.



We believe in the individual approach – if you applied independently, once selected, you will be assigned to a team that complements your skills. If you applied as a team we will enable your joint participation. In the first week of the App Camp you will also be matched with one of the Space App Camp Content Mentors and meet all experts who will be helping with your Mobile App idea development.

Finally, the Space App Camp programme has two parallel paths:

- (1) **Learning sessions** scheduled with our mentors and experts where you will:
  - Experience customised learning content;
  - Receive feedback and guidance from supporting engineers;
  - Demonstrate your progress;
  - Interact with your fellow Space App Camp Participants and our special Guests.
- (2) **Development phase** that will take place in the intersession period where you will be working with your team (on your agreed schedule) to achieve your objective development of a concept and a working prototype of the Mobile App.

## Schedule

Here is our overall schedule for the summer.

Date	Event
21 - 30 June	Stay Tuned for the Space App Camp information session! It will be announced on our website and through social media
14 July	Space App Camp applications closing date



16 July	Notification to the selected Participants and grouping of Participants in teams	
20 July	Space App Camp Lift Off!	
22 – 29 July	<ul> <li>Orientation week</li> <li>22 July - Teams present their initial Mobile App concepts &amp; ideas</li> <li>27 July - Teams Matchmaking with Content Mentors (meeting with technical and thematic experts)</li> <li>29 July - Matchmaking decision – Content Mentors and teams confirm their commitments</li> </ul>	
29 July -20 September	Learning & Development Sessions	
20 September	Final Pitch and Award Ceremony	

### Learning Content

The general Space App Camp Learning & Development content to be covered during our eight-week long Mentorship Programme will be built around 6 main building blocks:

- Technical Support (TCS) Sessions
- IPR Support (IPRS)
- Thematic Support (THS)
- Business Model Canvas Support (BMCS)
- Graphic Design Support (GDS)
- Pitch Training (PS)

They are described in the table below:



Name	Definition	Learning Content	Learning Output
Technical Support (TCS)	Technical Support sessions will cover the following topics based on expressed interest: - Earth Observation - Al for Image interpretation and object recognition - VR/AR - Edge compute / Edge-AI - IoT - Gamification - Blockchain - Crowdsourcing and citizen Science The participants will learn these technologies & underlying principles while developing their own apps under the guidance of experienced engineers. Learning Format: 1. General Presentation 2. 4 individual sessions once every 2 weeks	<ul> <li>After completing this learning block, you will be able to:</li> <li>Understand key theoretical principles of the given technology stack.</li> <li>Appreciate the fit-for-purpose principle and apply it.</li> <li>Experience situated-learning, e.g. practical tasks and assignments, helping you to master a new aspect of the technology.</li> <li>Differentiate nice-to-haves from essentials and define your own software development cycles into achievable sprints.</li> <li>Gather data and code examples needed for the software development.</li> </ul>	This learning block leads to development of the Mobile App software prototypes.
IPR Support (IPRS)	The Intellectual Property Session will provide opportunity for training dedicated to the specific IPR aspects of the Mobile App development cycle. Learning Format: 1. General Presentation 2. One individual session for each team	<ul> <li>After completing this learning block you will be able to:</li> <li>Understand the IP legal landscape that governs the development and commercialisation of mobile apps.</li> <li>Address issues concerning confidentiality and trade secrets protection, ownership, registerability and protectability of IPRs. Explore the implication of using code released under FOSS licences.</li> <li>Review the mobile apps value chain and identify the relevant IP rights, protection options and strategies.</li> <li>Make informed strategic business decisions based on the relevant legal ecosystem</li> </ul>	This learning block leads to the definition of the IPR regimes that are specific to the given circumstances of each Mobile App development scenario (per Space App Camp team) covering the following aspects: trade secrets, copyright, patents, trademarks, and industrial designs.



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		and IP related to designing and publishing mobile apps.	
Thematic Support (THS)	<ul> <li>Thematic Support Session is meant to enhance your team's Mobile App concept based on the operational integration of the Earth Observation to the mobile application. It will be delivered for the following thematic categories:</li> <li>Marine Litter and Coastal Zones Management</li> <li>Early Warning Fire detection</li> <li>Artificial Intelligence for EO data</li> <li>Smart Cities in 3D</li> <li>Health &amp; Tropical Disease Risk Forecasting</li> <li>Education applications for EO and AI</li> <li>Gamification,</li> <li>Your own App idea</li> <li>Learning Format: <ol> <li>General Presentation</li> <li>One individual session for each team once a week</li> </ol> </li> </ul>	<ul> <li>After completing this learning block, you will be able to:</li> <li>Understand key theoretical principles of the thematic Earth Observation application domain.</li> <li>Appreciate the input data requirements a thematic application poses for a particular use case.</li> <li>Differentiate thematic methods based on their suitability to utilise EO technology.</li> <li>Experience situated-learning e.g., practical tasks and assignments that will allow you to master a EO data processing requirements in the selected thematic domain.</li> <li>Gather data and code examples needed for the software development.</li> </ul>	This learning block leads to the definition of the EO thematic component of the Mobile App and integration via dedicated EO API.
Business Model Canvas Support (BMCS)	Business Model Canvas Support Training is dedicated to enhancing the business thinking behind the software development process. This is where the technology and entrepreneurship are coming together. Learning Format: 1. General Presentation 2. Two individual sessions every 4 weeks	<ul> <li>After completing this learning block, you will be able to:</li> <li>Understand and put into practice the information required for the various business model canvases.</li> <li>Create a business plan that can be validated.</li> <li>Identify and distinguish potential stakeholders, target group and users.</li> <li>Perform market analysis.</li> <li>Create and analyse financial metrics.</li> <li>Estimate income and expenses for the proposed business case.</li> <li>Understand business idea validation.</li> <li>Define business idea validation activities and execute them.</li> </ul>	This learning block leads to the definition of a validated business idea, financial model, including customised Business Canvas, for your developed Mobile App.



Graphic Design	The Graphic Design Support	<ul> <li>Receive feedback on individual canvas sheets.</li> <li>After completing this learning</li> </ul>	This learning block
Support (GDS)	Session is aimed to provide tools to the teams in terms of product branding as well as the customised design support applied to each team's concept. Learning Format: 1. General Presentation 2. One individual session for each team	<ul> <li>Vise completing this learning block, you will be able to:</li> <li>Use and work with provided icons, color schemes, splash screens etc.</li> <li>Advance your UI/UX skills</li> <li>Receive feedback on your initial graphic design ideas</li> <li>Create of the logo of your Mobile App concept.</li> <li>Develop mobile app design concepts</li> <li>Optimise and fine tuning your App design</li> <li>Receive graphic support with deep design insights</li> </ul>	results in your product logo, branding and UI design
Pitch Support (PS)	<ul> <li>The Pitch Support (PS) session is aimed to help master the team's Business Pitch in preparation to the final presentation.</li> <li>1. General Presentation</li> <li>2. One individual session for each team</li> </ul>	<ul> <li>After completing this learning block, you will be able to:</li> <li>Understand how to structure pitch presentation under time constraints.</li> <li>Receive feedback from experienced professionals.</li> <li>Clarify your "story".</li> <li>Develop concrete skills to build confidence.</li> <li>Communicate more effectively through virtual presentations.</li> </ul>	This learning block results in your Mobile App Pitch Presentation.

In addition to this learning content our Organizing Team will be available to you to create a fun and stimulating App Camp experience. We want to keep you engaged so expect a lot of the social events, milestone achievement perks, mentoring meetings and motivational speakers!

We will also be available to you for the regular Q&A meetings to address any bottle necks or problems that arise.

Check our website regularly for the updates and for any questions please contact:

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