

# Advanced Wearables Project Support and Q&A

Advanced Wearables Community Contest Webinar

*Torbjørn Øvrebekk / Team Lead Technical Support*

*June 2021*

# Today's hosts

Torbjørn Øvrebekk



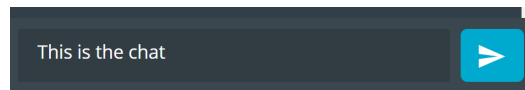
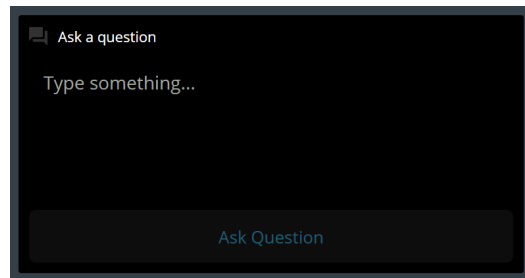
Team Lead

Technical Support



# Practicalities

- Duration: about 60 minutes
- Questions are encouraged!
  - Please type questions in the top of the right sidebar
  - All questions are anonymous
  - Try to keep them relevant to the topic
  - We will answer towards the end
- The chat is not anonymous, and do not use for questions
- Go to DevZone if you have more questions
- A recording of the webinar will be available together with the presentation at [webinars.nordicsemi.com](https://webinars.nordicsemi.com)



# How to add a peripheral in NCS

- Define your peripheral instance in DTS
- Enable the peripheral in prj.conf
  - I.e CONFIG\_I2C=y when using I2C
- Include the driver file in main.c
  - `#include <drivers/i2c.h>`
- Run `device_get_binding(label)` and store the result in a device struct
  - `const struct device *device = device_get_binding("I2C_1");`
- Use the functions defined in the driver header file, and pass the device struct as an argument
  - `int error = i2c_write(device, i2c_data, sizeof(i2c_data), i2c_address);`

## For further reading

- Blog: Adding a Peripheral to an NCS Zephyr project  
<https://devzone.nordicsemi.com/nordic/nrf-connect-sdk-guides/b/peripherals/posts/adding-a-peripheral-to-an-ncs-zephyr-project>
- Devzone ticket: How to add SPI and I2C  
<https://devzone.nordicsemi.com/f/nordic-q-a/70627/what-s-the-official-way-to-implement-a-simple-peripheral-spi-i2c-etc-with-ncs/290615#290615>
- Simple SPI example  
[https://github.com/Rallare/fw-nrfconnect-nrf/tree/nrf9160\\_samples/samples/nrf9160/spi](https://github.com/Rallare/fw-nrfconnect-nrf/tree/nrf9160_samples/samples/nrf9160/spi)

## Good to know

- DTS files for the nRF5340:  
`\zephyr\dtb\arm\nordic\`
- Board files for the nRF5340DK:  
`\zephyr\boards\arm\nrf5340dk_nrf5340\`

# Register for upcoming Nordic Tech Webinars

[www.nordicsemi.com/webinars](http://www.nordicsemi.com/webinars)

Q&A