This table shows the current complete list of interfaces in the student portal for your project. This output can be helpful for summarizing your current project state and looking for discrepancies in the system architecture. This page is not guaranteed to be visible to users who are not students of ECE44x.

The table below can be 'Copy and Pasted' into Google Sheets, Excel, MS Word, and a variety of other tools.

Name	Properties
otsd_hmdty_envin	• **Humidity:** up to 90% humidity • **Humidity:** min 0% (humidity cannot be below 0, it is a ratio) • **Water:** No Standing Water
otsd_tmprtr_envin	• **Temperature (Absolute):** as low as 0 degrees farenheit • **Temperature (Absolute):** as high as 120 degrees farenheit • **Water:** No Standing Water
otsd_shck_envin	• **Other:** Affixed to mechanical mounting point with no shock (dampening) mount • **Water:** No Standing Water
otsd_atmsphrc_prssr_envin	• **Other:** The input to this block must not sustain physical contact during block operation. • **Water:** No Standing Water
otsd_gps_rf	• **Datarate:** 10 Hz to 18 Hz • **Messages:** GPS data stream • **Protocol:** NMEA
otsd_mcrcntrllr_dsig	• **Other:** Firmware programming through internal USB pins • **Other:** Bootloader programming through Serial Wire • **Vnominal:** 3.3V
otsd_ornttn__envin	• **Other:** Acceleration: up to 4g's in the x direction • **Other:** Acceleration: up to 4g's in the y direction • **Other:** Acceleration: up to 4g's in the z direction • **Other:** Orientation: 720 degrees of rotation per second (2 rotations in 1 second)
hmdty_mcrcntrllr_dsig	• **Other:** Readable Data: Readable Humidity Values in terms of % relative Humidity (ex: 40.00% RH) • **Other:** Protocol: I2C • **Other:** Logic Level: 3.3V
tmprtr_mcrcntrllr_dsig	• **Logic-Level:** 3.3V • **Other:** Readable data: temperature values in Celsius and farenheit • **Other:** Protocol: I2C
shck_mcrcntrllr_dsig	• **Logic-Level:** 3.3V • **Other:** Protocol: SPI (for configuring interrupt) • **Other:** Interrupt signal to microcontroller
atmsphrc_prssr_mcrcntrllr_dsig	• **Logic-Level:** 3.3V • **Other:** Protocol: I2C • **Other:** Readable Data: barometric pressure and altitude

gps_mcrcntrllr_dsig	• **Logic-Level:** 3.3V • **Other:** Readable Data: lattitude, longitude, and current date and time • **Other:** Protocol: UART
bttry_mcrcntrllr_dcpwr	• **Inominal:** 25mA • **Ipeak:** 250mA • **Vmax:** 13V • **Vmin:** 7V
sd_crd_otsd_usrout	• **Other:** Data formatting must be in a csv • **Type:** SD Card • **Usability:** SD card must be easily removable by user
frmwr_mcrcntrllr_data	• **Messages:** Processed Data • **Other:** Language: C
mcrcntrllr_sd_crd_data	• **Messages:** Processed Sensor Data • **Protocol:** SPI
mcrcntrllr_frmwr_dsig	• **Other:** I2C Data • **Other:** Sensor Signals • **Other:** Control/Configuration signals
ornttn__mcrcntrllr_dsig	• **Other:** Data format: readable orientation vector [x, y, z] • **Other:** Data format: readable acceleration value [x, y, z] • **Other:** Protocol: I2C at 3.3V logic level