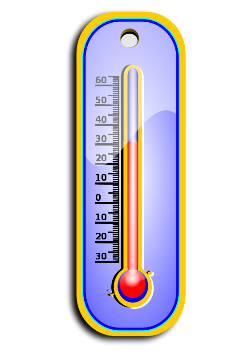
BrewBuddy

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I want to monitor the temperature of a fermentation vessel for home brewed beer and send a notification if the temperature falls outside of the optimum range. My proposal is as follows:



Using the SenseHat on the raspberry Pi the temperature in a fridge will be constantly monitored. An acceptable temperature range (17-22°C) will be specified for fermentation of an IPA. If the temperature goes outside of this range, I will be notified by a web app and prompted to either turn on or off the refrigerator. I will also monitor the humidity in the fridge and trend the data for both temperature and humidity (max., min., and average). Using the Bluetooth feature of the kitchen speaker I will also send a warning sound via the speaker to notify that the temperature is out of the correct range using the raspberry pi. Additionally, I will connect the camera module to use as a motion detector to be notified if anyone opens the fridge during the fermentation period.

I propose to use Blynk to the create the app and Python to program the Raspberry Pi to monitor the temperature in the fermentation chamber. I will use the Bluetooth feature of the Raspberry Pi to send the alert to the speaker. Using SMTP to send an email of the picture captured when the fridge is opened.

Project Repository:

Will be completed on GitHub: https://github.com/MaireadHolton/CompSysAssignment2





Graphical user interface

Description automatically generated