Pie Checker

*When using the oven, you usually stand in front of the oven and check the food regularly by looking through the oven windows. Team Fruit Cakes will improve this experience with the Pie Checker. This device can be attached to your oven and it will monitor your food, and relay this information to any of your devices. Allowing you to enjoy the freedom of movement while waiting for your food to bake.*

### Project Goals

Team Fruitcakes will develop the Pie Checker using a Scrum approach. The Pie Checker is a Raspberry Pi which receives data from a temperature probe and camera. It also streams that data over a wireless network. To produce a GUI to allow a user to view the streamed data on a PC or smartphone.

We are also considering including the possibility to:

* provide a user with the means to setup the device on their home network
* allow the user to control the device from a PC or smartphone

### Features

Initially we are planning to implement the camera, and send the video stream over a WiFi network. We are however brainstorming on additional features, including:

* Timer / clock
* Food temperature
* Image streaming
* Wireless
* Remote Control
* On/Off switch
* Data saving
* Battery powered
* Power monitoring

### User Stories

User wants to

* stream data to their PC or smartphone
* set a timer
* capture a still image
* set a save location for data
* change the save location
* know the temperature of the food
* know the battery life of the device
* see if the Pie Checker is on

### Components

* Raspberry Pi
* Wi-Fi module
* Camera
* USB cable (for initial setup)
* Temperature probe
* Power switch
* Battery pack
* LED light

