**Calendar Project for CS**

**Objectives:** To design an electronic calendar device that attaches to the wall outside a professor’s office. The intent of the device is to help students schedule meetings with professors when they are not in their office. Often a student may come by a professor’s office to ask a question, only to miss the professor by minutes. Some professors may not want to share ALL the calendars that they use to manage their day with their students. This will be a quick way to request a meeting time instead of exchanging several Emails before settling on a time.

**Requirements:**

* **Physical size: The device must** 
  + Fit into the space between the Mullion and Casing of the door, fitting over the sidelight.

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| Figure 1: Anatomy of a door  General terminology used to describe parts of a door.  https://www.marvin.com/blog/parts-of-a-door |

* + Extend by linkage/cam into and out of a case for ergonomic viewing
* **The software must**
  + Allow for interface with Google Calendar & Microsoft Exchange (or Microsoft Bookings)
  + Update every 10-30 mins
  + Require minimal input from faculty to set up
    - Obtain calendar info from web automatically
    - Require less than 5 steps to set up
  + Allow for an ability to decline or accept of appointment requests
    - Request information from student
      * Name
      * Email
      * Date/Time
      * Class
      * Title/Topic
      * Notes/Comments
      * Phone # (Optional)

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| Figure 2: Example of Scheduling Interface  This is an example of an interface that could be used to schedule/request meetings with faculty. |

* + - Suggest a slight adjustment of plus-or-minus 15-minutes before confirming the appointment. (To account for “walking time” between buildings.)
    - Notify both faculty and student of acceptance and decline
  + Limit requests to be
    - at minimum 4 hours in advance
    - at most 24 hours in advance.
  + Allow faculty to select range of allowable meeting times.
    - 8:00 AM to 5:00 PM for example
    - Increment in 15-minute intervals
  + Show faculty class and meeting schedule
    - Faculty should be able to select calendars to share
    - Color code different calendars
  + Notify student/faculty if a meeting needs to be (or is) cancelled by faculty
* **Hardware**
  + Raspberry Pi (not required, but included)
  + Touchscreen interface (not required, but included)
  + Connect via Wi-Fi

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| Figure 3: Example of Current Hardware  Current hardware mechanical design consists of a linkage to position the touchscreen at an ergonomic viewing angle. |

* **Cost**
  + Less than a similar sized tablet device.