

```

        every list [date,[times]] in empties
    empties:
        the date in empties is the same as the date of the c
        make sure that we only effect times on the day the e
    if k[0] == evDate:
        l = 1
        # iterate through the times of k and change
        while l < len(k):
            # FIRST if the event is the same as
            if (j.sTime == k[l][0] and j.eTime == k[l][1]):
                k.remove(k[l])
                # drop l down by one as
                l-=1
            # THEN if the event is later than the last event
            elif (j.sTime > k[l][1]):
                temp = k[l][1]
                k[l][1]=j.sTime
                k.append([temp,j.eTime])
            # THEN if the event is earlier than the last event
            elif (j.sTime < k[l][0]):
                k[l][0]=j.sTime
            #

```



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Team 3: Smart Scheduler Bi-Weekly Update 3

Collin Bennett, Nicholas Garde
Sponsor: Narasimha Annapareddy

TA: Eric Robles

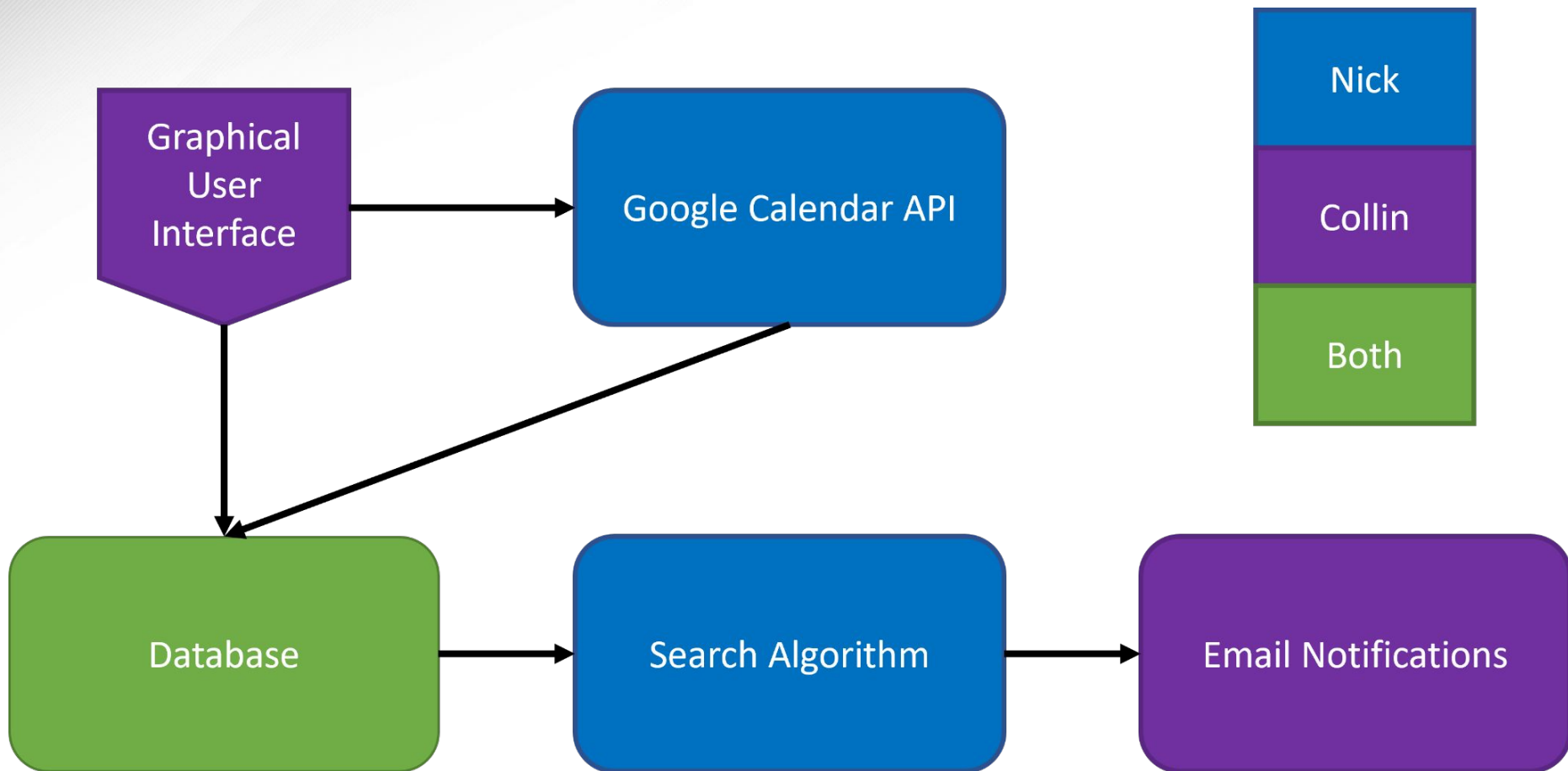


Introduction

- Scheduling meetings can be very difficult, so we are simplifying the process.

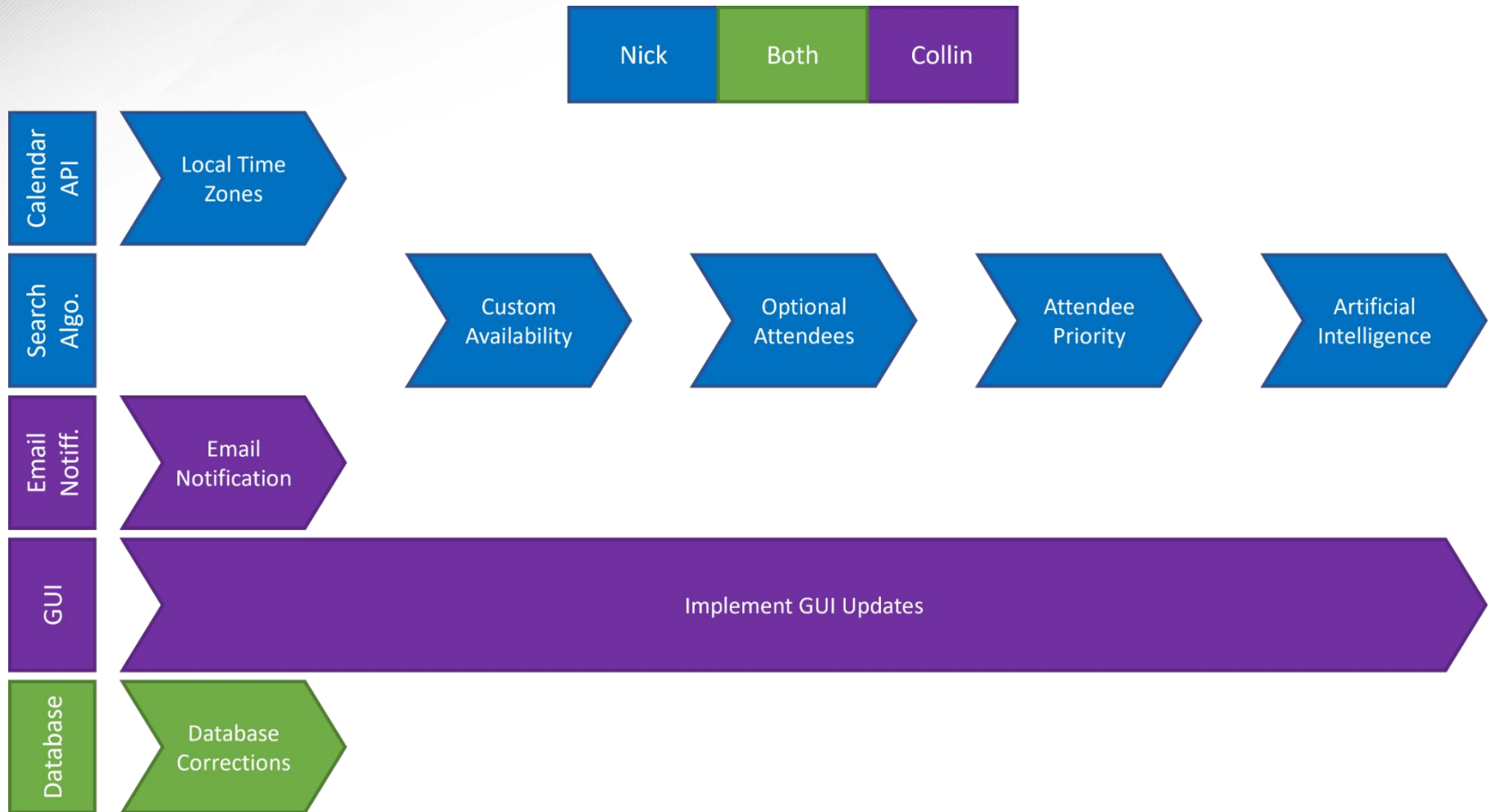
| Mon | Tue | Wed | Thur | Fri |
|--------|--------|--------|--------|-------|
| Blue | Green | | Blue | Blue |
| Green | Green | Green | Purple | Grey |
| Orange | Blue | Purple | Orange | Grey |
| Orange | Orange | Purple | Orange | Green |
| Purple | Orange | Purple | Orange | |

Project/Subsystem Overview





Project Timeline





Graphical User Interface

Owner: Collin

| Since last presentation: 10 hours of effort | Ongoing progress/problems and plans until the next presentation |
|--|--|
| <ul style="list-style-type: none">- Fixed a time display bug- Corrected page loading errors | <ul style="list-style-type: none">- Implement optional/required attendees- Delete RSVP page (email) |

Graphical User Interface

Owner: Collin

- Planning to add the ability to import contacts from Google
- Making updating and deleting contacts simpler

After

Before

Optional - Add contacts to contact list.

Enter a full name.

Enter an email.

John Smith added to contact list.

CREATE NEW CONTACT

My Contacts

Search for a contact here.

| | | |
|--------------------|--------|--------|
| Alexandra Bennett | UPDATE | DELETE |
| Fabio Lanzoni | UPDATE | DELETE |
| Loid Forger | UPDATE | DELETE |
| collinbennettgmail | UPDATE | DELETE |



Database

Owner: Both

| Since last presentation: 5 hrs of effort | Ongoing progress/problems and plans until the next presentation |
|---|---|
| The SQLite database has been ported to PostgreSQL and hosted on AWS Slight structure changes | Slight modifications/refinements will be made as needed |



Database

Owner: Both

Before

```
▼ Meetings
  ▼ Goof Off
    (▶) collinbennett@tamu,edu
    ▼ ngarde2882@tamu,edu
      ▼ -N0pizcr3gv1eoibvCVg
        — end: "2022-04-29T18:00:00-05:00"
        — start: "2022-04-29T08:00:00-05:00"
        — summary: 1
      ▼ Group Study Session
        ▼ collinbennett@tamu,edu
          ▼ -N0pj4MzmKODmwXFInJy
            — end: "2022-04-29T18:00:00-05:00"
            — start: "2022-04-29T08:00:00-05:00"
            — summary: 1
        (▶) gholmes@tamu,edu
        (▶) ngarde2882@tamu,edu
        (▶) sfiguiera@tamu,edu
```

After

| AUTHENTICATION AND AUTHORIZATION | |
|----------------------------------|-------|
| Groups | + Add |
| Users | + Add |
| | |
| SMART_SCHEDULER | |
| Attendees | + Add |
| Conflicts | + Add |
| Contacts | + Add |
| Events | + Add |
| Meeting immediates | + Add |
| Meeting times | + Add |
| Meetings | + Add |
| Pending attendees | + Add |
| | |
| USERS | |
| Profiles | + Add |



Search Algorithm

Owner: Nick

| Since last presentation: 10 hrs of effort | Ongoing progress/problems and plans until the next presentation |
|--|---|
| New data structure to be compatible with local time zones and user preferences | Take into account optional attendees and priority of attendees |

Search Algorithm

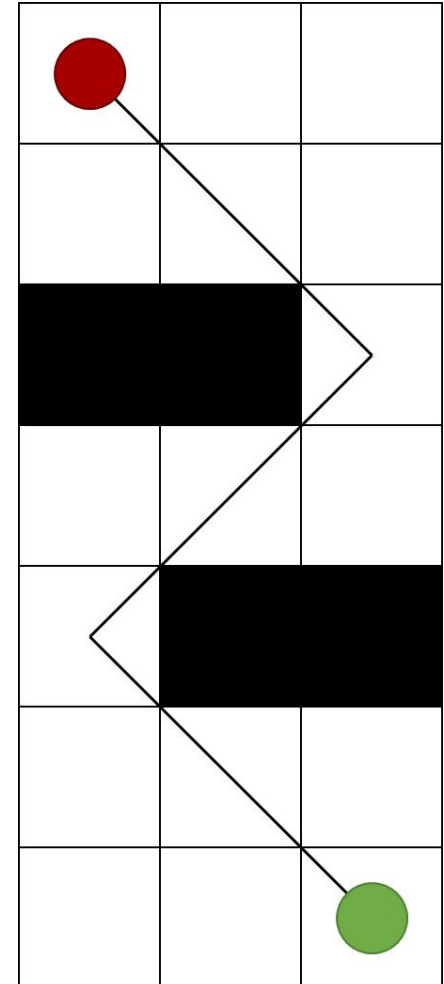
Owner: Nick

Current Design

- Places events onto calendar data structure
- Searches by # of conflicts
- Take into account number of participants in each meeting
- 24hr data structure

Planned Design

- Optional Attendees
- Take into account priority of participants





Calendar API

Owner: Nick

| Since last presentation: 5 hrs of effort | Ongoing progress/problems and plans until the next presentation |
|---|--|
| Pull user time zone | Optional “Remember Me?” |



Calendar API

Owner: Nick

Current Design

- Pulls user events from their calendar
- Pushes created events back onto their calendar
- Retrieve user time zones

Planned Design

- Option to skip authentication





Email Notifications

Owner: Collin

| Since last presentation: 5 hours of effort | Ongoing progress/problems and plans until the next presentation |
|--|---|
| <ul style="list-style-type: none">- Email notifications have been integrated into the app as a Github branch | Testing and refinement of email notifications |



Execution Plan

| | | | | Completed | In Progress | Not Started |
|-----------------------------|--|--|--|---|---|---|
| Subsystem | August 31st | September 14th | September 28th | October 12th | October 26th | November 7th |
| Search Algorithm (Nicholas) | Review changes to algorithm and receive sponsor feedback | Implement timezone functionality | Implement custom start and end times, valid days | Researching better machine learning and lowest-cost solutions | Iron out any potential oddities in the search algorithm | Have search algorithm completely done |
| Database (Both) | Move from firebase to relational database | Simplify database, getting rid of unnecessary tables | Have database ported from SQLite to PostgreSQL and hosted. | Continue work on other subsystems | Check database for correctness | Database is done, hosted and complete |
| GUI (Collin) | Django website bug fixes and refinements | Have some form fields optional to speed up the process | Have required and optional attendee functionality integrated | Get additional user feedback on the website style | Implement changes based on the user feedback | GUI is finalized and styled |
| Email Notification (Collin) | Rework email to SMTP from API functionality | Email is properly styled | Email is fully functional on a basic level | Email is not being sent to user's spam folder | Validate and test email | Email is sending without error and styled |
| Google APIs (Nick) | Review and research Google APIs in Django | Integrate timezone functionality with Google API | Integrate Google contacts imports | Begin testing correctness of API calls | Finalize testing of API calls | Google APIs are finalized |



Validation Plan

| | | | Completed | In Progress | Not Started |
|--------------------------------------|--|--|-----------|-------------|----------------|
| Task | Specification | Method | Result | Owner | |
| Google Calendar - Pull Contacts | Test Fetching Accuracy (No errors) | Using Google's OAuth2.0 to request contact data from the user from their email | Pending | | Collin Bennett |
| Google Calendar - Insert Event Times | Google API is properly inserting correct event times | Ensure that calendar events can be added to specified user calendars without error. Specifically, ensuring that users in different time zones are being sent the proper information. | Pending | | Nicholas Garde |
| Database - User Authentication | Database is storing user account details | Ensure PostgreSQL solution is working properly | Complete | | Collin Bennett |
| Database - Event Parameters | Ensure event parameters are added properly | Add several events of varying nature to Database from the GUI, ensuring that they are properly added each time by comparing the inputted values to those stored in Database. | Complete | | Collin Bennett |



Validation Plan (Continued)

| Task | Specification | Method | Result | Owner |
|--|--|--|---------|-----------------------------------|
| Database - User Events | Ensure User events are properly added | Pushing each user's calendar to database to be stored until the data is needed for the search | Success | Collin Bennett |
| Search Algorithm - Time Zones | Ensure User events have proper times | Ensure that users in different timezones are correctly accounted for by the algorithm | Pending | Nicholas Garde |
| Search Algorithm - Additional Parameters | Valid times and weekdays | Ensure that additional parameters are correctly accounted for by the algorithm | Pending | Nicholas Garde |
| Email API Correctness | Testing of Email Notification Scenarios | Ensure the email link clicks make the proper writes to the database and move efficiently. | Pending | Collin Bennett |
| GUI - Ease of Navigation | Exploring GUI navigation ease-of-use | Ensure the GUI navigation works properly, nothing is out of place, and correct error messages are displayed. | Pending | Collin Bennett |
| Bug fixing | Attempting to break and Find Errors in Our Program | Ensure that the program works under all conditions by scheduling numerous programs under varying conditions and checking that they are scheduling correctly. | Pending | Collin Bennett and Nicholas Garde |



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Questions?