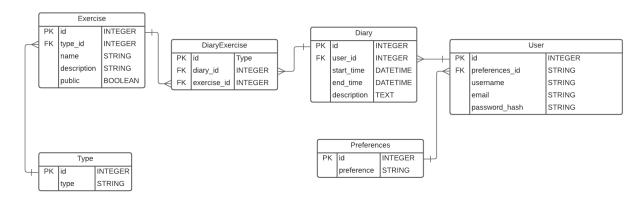
## 13DTP Project Planning

https://github.com/idoyt/practicetool

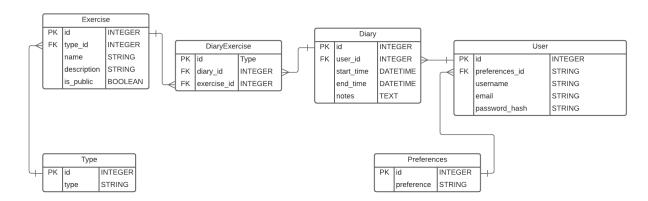
Purpose, Function, and End User of my Website.

I will be designing a diary web application, to track progress and help users reach their goals. Primarily used for tracking when the user practices and what they're doing, should help them set goals and that.

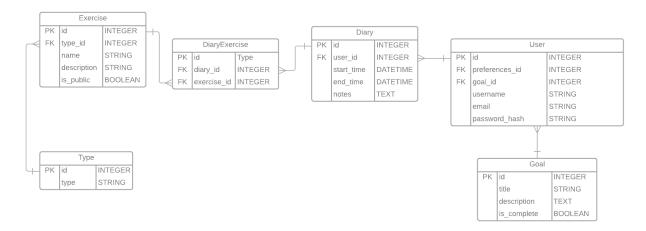
Database Notes and Layout.



This is the first iteration of the erd, preferences table will be used to save a set of user inputted data, i.e. ui preferences etc. Exercises that the user performs during that session can be saved and stored for future use and CAN (not must) also be made public. Description in the diary is used for noting down anything the user wants to note down for this specific session.



Changed some of the row names so they make more sense.



Added goal setting table, removed preferences too hard to store user preferences

routes\* / function signatures\*\* for each page

Landing // @app.route('/') // def landing():

Dashboard // @app.route('/dashboard') // def dashboard():

Diary // @app.route('/diary') // def diary():

Diary Log // @app.route('/diary/log/<int:id>'/') // def diary\_log(id):

New Entry // @app.route('/diary/add') // def diary\_add(id):

Edit Entry // @app.route('/diary/edit/<int:id>') // def diary\_edit(id):

Goals // @app.route('/goals') // def goals(id):

Set Goals // @app.route('/goal/add/') // def goal add(id):

Edit Goals // @app.route('/goal/edit/<int:id>') // def goal edit(id):

Search // @app.route('/search', methods=["POST", "GET"]) // def search():

Register // @app.route('/register) // def register():

Login // @app.route ('/login') // def login():

Logout // @app.route ('/login') // def logout():

### Website layout and design

For a webapp like this I want to make it very simple, and it must be functional, I want it to be able to get all the data and parse it into a readable format so that the user can view it and see their progression.

# Search Bar Search Options Exercise: type On: date Before: date During: date After: date Recent Searches Exercise: monkey doo doo On: 18/03/2022 Before: 18/03/2022

Practice Tool

Login

password

Forgot password

register

Login

Notes: default search

for each entry

searches by notes made

### Practice tool

Navigation - Dashboard, Diary, Goals

Settings Logout

Settings

Logout

On hover User menu appears

STREAK How many days in a row

Graphs statistics, Most common tags Hours spent etc

### Footer

### Practice tool

Navigation - Dashboard, Diary, Goals

Diary Entries

List of entries

18/03/2022

Notes: lorem ipsum...

17/03/2022

Notes: lorem ipsum...

16/03/2022

Notes: lorem ipsum...

15/03/2022

Notes: lorem ipsum...

New Entry

Date time

Start time

End time

Notes

Footer

On hover User menu appears

avigation - Dashbo		
Diary Entries  List of entries	Edit entry	Settings Logout
18/03/2022	Date time	
Notes:	Start time	
lorem :17/03/2022 :psum Notes:	End time	
lorem :16/03/2022 :05um Notes:	Notes	
lorem 15/03/2022 Ibsum Notes:		
lorem		
ipsum	Footer	

### Practice tool

Navigation - Dashboard, Diary, Goals

Settings Logout

### Goals

18/03/2022 Notes:

lorem :17/03/2022 ipsum... Notes:

orem [6/03/2022

lorem :15/03/2022 ipsum... Notes:

lorem ipsum...

### **Goal Setting**

Goal Title

Whether you've achieved the goal or not

Description of the goal if the title is not enough

Footer

# Practice tool Navigation - Dashboard, Diary, Goals Settings Logout USER SETTINGS Password, email changing that sort of thing.

Database queries for each route (SQL query/queries) and expected sample results

query	Expected result	Purpose
<pre>models.User.query.filter_ by(username=form.username .data).first()</pre>	Retrieve the first entry that matches user input	Used to get check if user inputted user is a user in the database
<pre>models.User.query.get(int   (id))</pre>	Retrieve current user id	Get the id of the user logged in on current session
<pre>models.User(email=form.em ail.data, username=form.email.data)</pre>	Username and email added to user table	Used to register an account on the website.
<pre>models.Diary.query.filter _by(user_id=current_user. id).all()</pre>	Get all the diary entries for the current user.	Used to render all the user's diary entries

<pre>models.Goal.query.filter_ by(user_id=current_user.i d).all()</pre>	Get all the goal entries for the current user.	Used to render all the user's goals
<pre>db.session.add(models.Goa l(title=form.title.data, description=form.descript ion.data, is_complete=form.is_compl ete.data))</pre>	Adds user goals from user input with forms	So the user can input goals
<pre>db.session.add(models.dia ry(start_time=form.start_ time.data, end_time=form.end_time.da ta, notes=form.notes.data))</pre>	Adds user diary entries from user input with forms	So the user can use the diary

```
routes* / function signatures** for each page
@app.route('/', methods=['GET', 'POST'])
@login_required
def index():
@app.route('/diary/<int:id>', methods=['GET', 'POST'])
@login required
def diary(id):
@app.route('/diary/create', methods=['GET', 'POST'])
@login_required
def create_diary():
@app.route('/diary/edit/<int:id>', methods=['GET', 'POST'])
@login required
def edit_diary(id):
@app.route('/diary/delete/<int:id>')
@login_required
def delete_diary(id):
@app.route('/entry/<int:id>', methods=['GET', 'POST'])
@login_required
def entry(id):
@app.route('/entry/create/<int:id>', methods=['GET', 'POST'])
@login required
def create_entry(id):
```

```
@app.route('/entry/delete/<int:id>')
@login_required
def delete_entry(id):
@app.route('/entry/<int:id>/tag/add/', methods=['GET', 'POST'])
@login_required
def add_tag(id):
@app.route('/entry/<int:id>/tag/remove/<int:tid>', methods=['GET', 'POST'])
@login required
def remove_tag(id, tid):
@app.route('/login', methods=['GET', 'POST'])
def login():
@app.route("/register", methods=['GET', 'POST'])
def register():
@app.route("/logout")
@login required
def logout():
```

Fonts / colours used

Fonts: Comic Sans MS

Colours: Off-white so it isn't as hard on the eyes and dark text that's in high contrast to the background so it is very legible, maybe textured to mimic paper

TEXT BLACK	Background #F3F3F3
BUTTON COLOUR #DDD	DANGER BUTTON #f44336

### Tools used

IDE -Visual Studio Code, Atom Database - Sqlalchemy Languages - CSS, HTML5, Python Flask Library General - Google Chrome, Github, lucid charts

### **Database Query Testing**

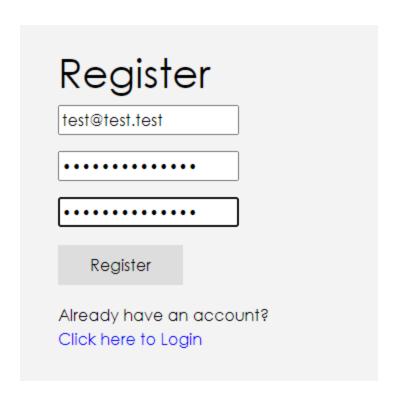
What you are testing	How you are	Expected	Actual	Pass/F	Purpose
	testing it	results	Results	ail/Not es	
models.Diary.query.fi lter_by(user_id=curr ent_user.id).all()	Running the code.	diary.title	Returns expected results	Pass	Query all of the user's diaries
models.Diary.query.fi Iter_by(user_id=curr ent_user.id, id=id).all()	Running the code.	diary.title diary.entry.date diary.entry.tags	Returns expected results	Pass	Query all of the entries of the user's specific diary.
models.Diary(user_i d=current_user.id, title=form.title.data)	Running the code.	Adds user inputted form data to the database.	Returns expected results	Pass	Query to add a new diary to the database.
models.Diary.query.fi Iter_by(user_id=curr ent_user.id, id=id).first_or_404()	Running the code.	diary.title	Returns expected results	Pass	Retrieve a specific diary to delete or edit.
models.Entry.query.fi Iter_by(user_id=curr ent_user.id, id=id).first_or_404()	Running the code.	entry.diary.title entry.date entry.notes entry.tags entry.notes	Returns expected results	Pass	Get the data from a user's entry.
models.Entry(user_i d=current_user.id, diary_id=id, date=datetime.today ().date())	Running the code.	Inserts an entry where user id is current user's, and diary is the diary that the user is currently in, for today.	Returns expected results	Pass	Create a new entry in a specified diary for today.
models.Tag.query.filt er_by(user_id=curre nt_user.id,	Running the code.	tag.user_id tag.name	Returns expected results	Pass	Query user entered tags to see

name=name).first()					if it exists
models.Tag(user_id =current_user.id, name=name)	Running the code.	Creates row for user entered tag.	Returns expected results	Pass	Creating a tag.
models.User.query.fil ter_by(email=form.e mail.data).first()	Running the code.	user.id user.email user.password_ hash	Returns expected results	Pass	Check if the user is registered.
models.User(email=f orm.email.data)	Running the code.	Creates a row for a new user.	Returns expected results	Pass	Registerin g user
user.set_password(f orm.password.data)	Running the code.	Sets a hashed password for the user.	Returns expected results	Pass	Set and encrypt the password.
user.check_passwordd(form.password.data)	Running the code.	Check if user inputted the correct password.	Returns expected results	Pass	Verify that the password the user entered is correct.

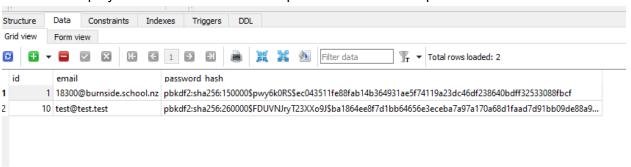
### Data Integrity and Testing.

User data integrity and testing

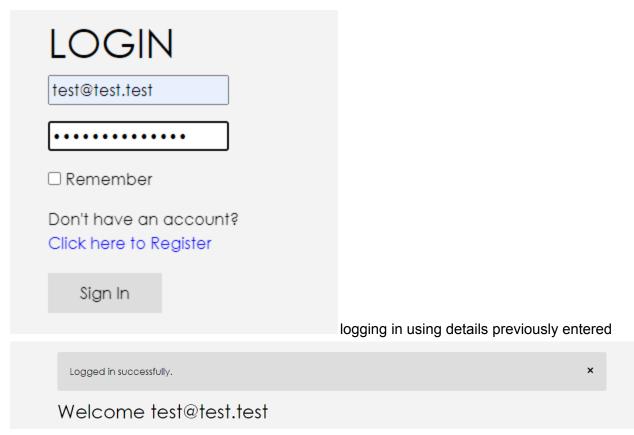
**SOURCE**: User input, all data comes from user input.



**Database** displays the same information I inputted with a hashed password.



**Display** 



Logged in successfully current user email matches entered email therefore data is correctly displayed and integrous. For user objects.

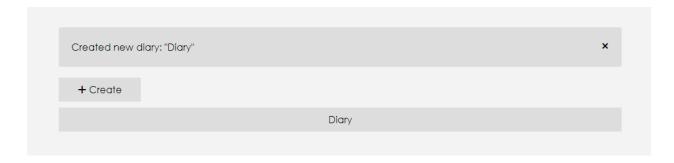
Diary data integrity and testing



Inputted title for diary as "Diary"

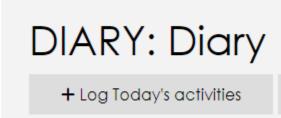


The test user's id is 10 so this is correct, title is correctly displayed in the database as well.

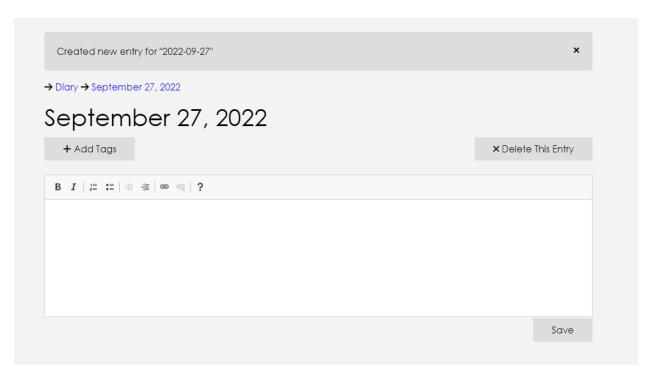


Diary has correct name, hovering over link reveals 127.0.0.1:5000/diary/33 correct id for the diary.

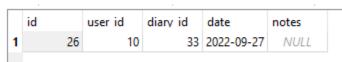
Entry data integrity and testing.



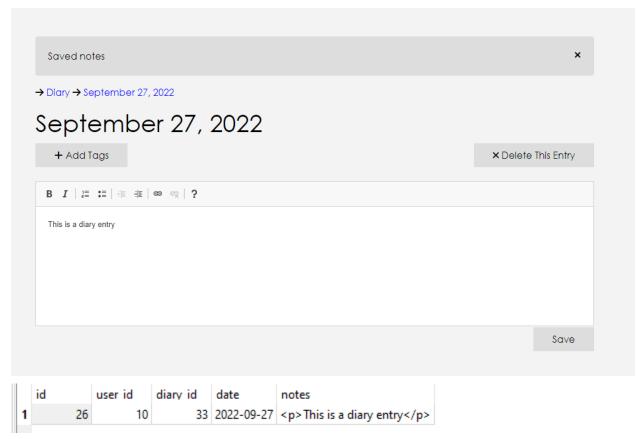
clicked log today's activities



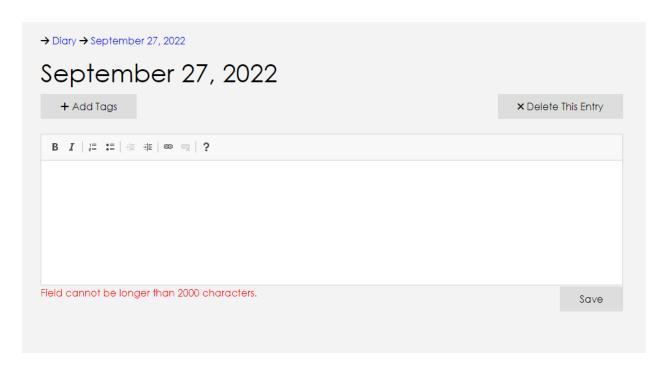
### Created a new entry.



Date and user are correct and so is diary id. 127.0.0.1:5000/entry/26 The entry number is also correct.



Notes update when I save notes. Data is correctly displayed on the website.



Checking what happens when more than 2000 characters are added and the user tries to save.



Testing what happens when nothing is entered into notes and the user tries to save.

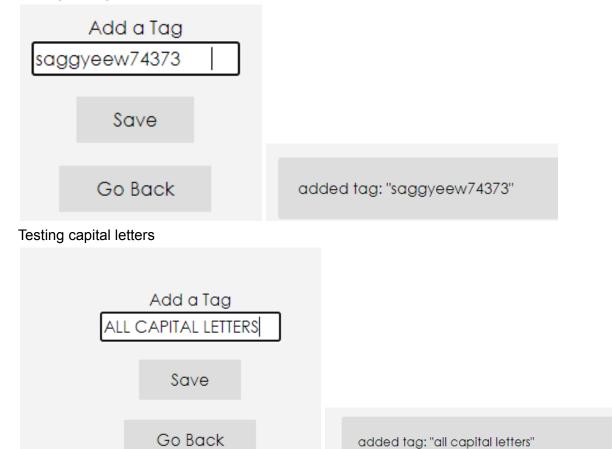
Adding tags data integrity and testing

Source:



Tag is supposed to be formatted to remove all capitalisation and trailing spaces.

Testing trailing spaces.



Testing if field is longer than the character limit (36 characters)





127.0.0.1:5000/entry/26/tag/remove/17 hovering over the function to remove tag shows the correct tag id, therefore the data entered is correct.

### **Testing navigation buttons**

→ Diary → September 27, 2022

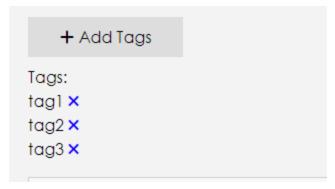


Pressing september 27, 2022 takes me back to this page.





Pressing the diary takes me back to the diary.



Checking tags are displayed properly when added.

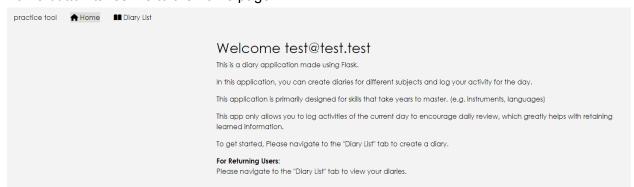


checking that there are no trailing commas on the main entries page.

### **Testing**

### Testing routes.

Home button takes me to the home page.



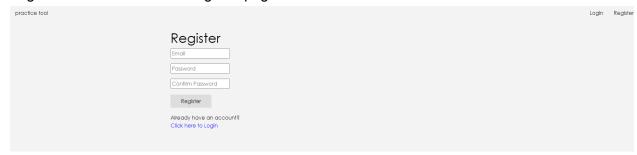
Diary list page takes me to diary list page.



Login button takes me to login page

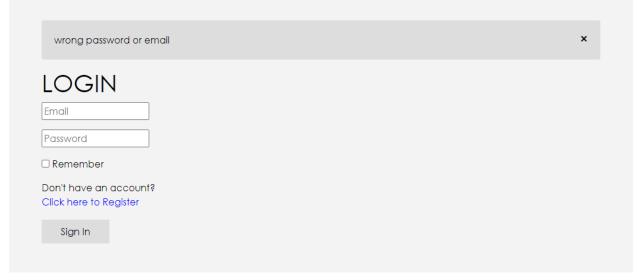


### Register button takes me to register page



### **Testing login functions**

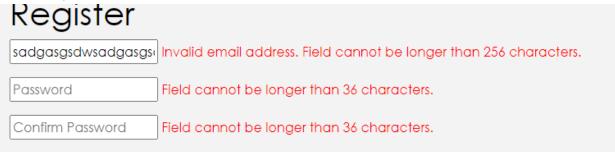
### When invalid email is entered



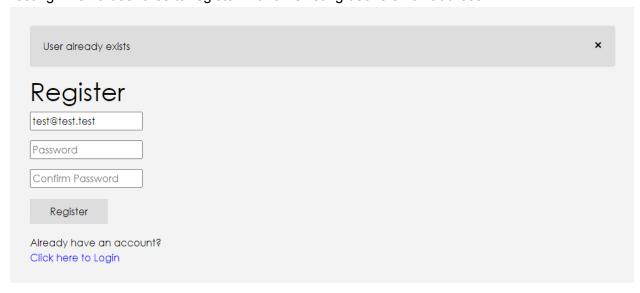
Testing when invalid email address is entered into the register, and also when password confirmation does not match previously entered password.

Register	
sagagasg	Invalid email address.
Password	
Confirm Password	Field must be equal to password.
Register	
Already have an acco	ount?

Testing what happens when inputs have more characters than the character limit. (256, 36 respectively)



Testing when a user tries to register with an existing user's email address.



When a user enters a valid email and passwords that match. Redirects and informs them.

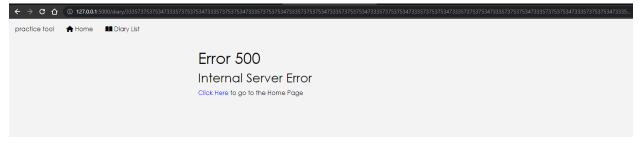


### Testing to see typing url bar would break it.

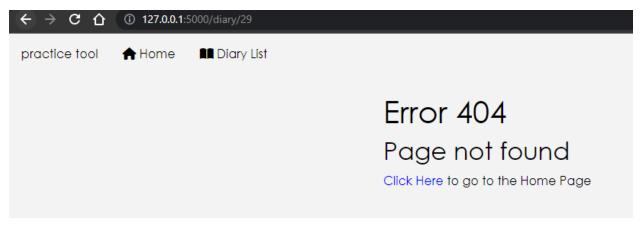
### Typing random numbers



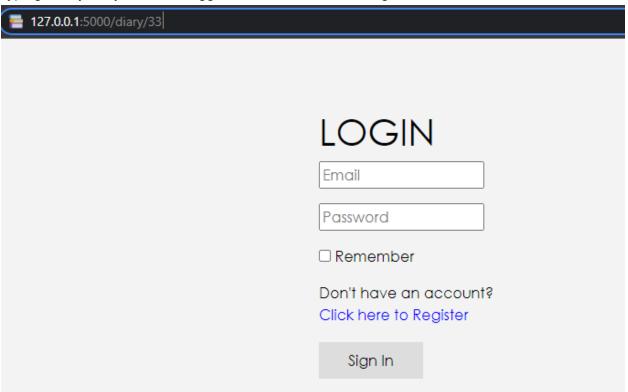
### Typing extremely large number



Typing in a diary owned by another user.

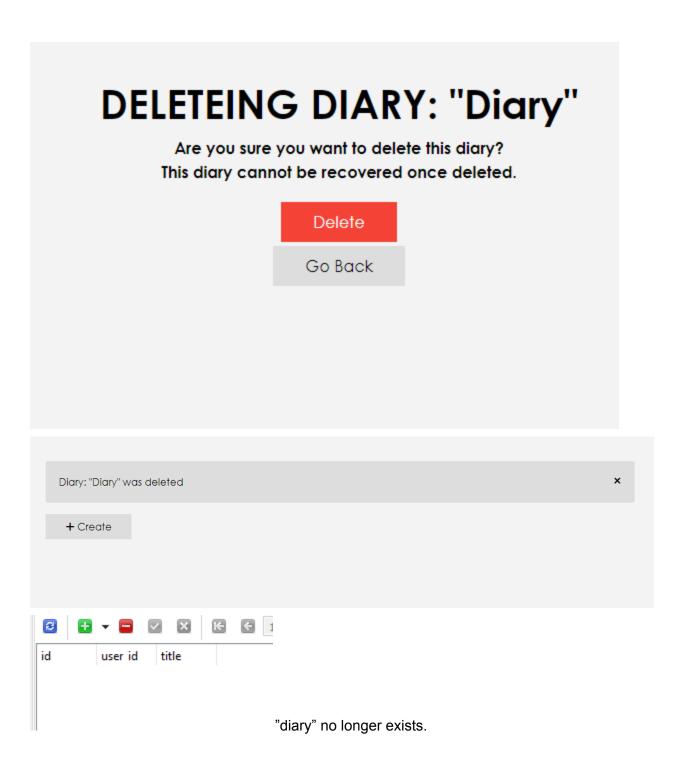


Typing in any diary while not logged in sends me back to login.

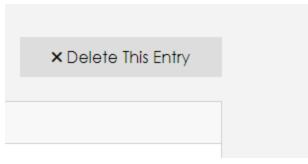


### **Testing deleting**

X Delete Diary

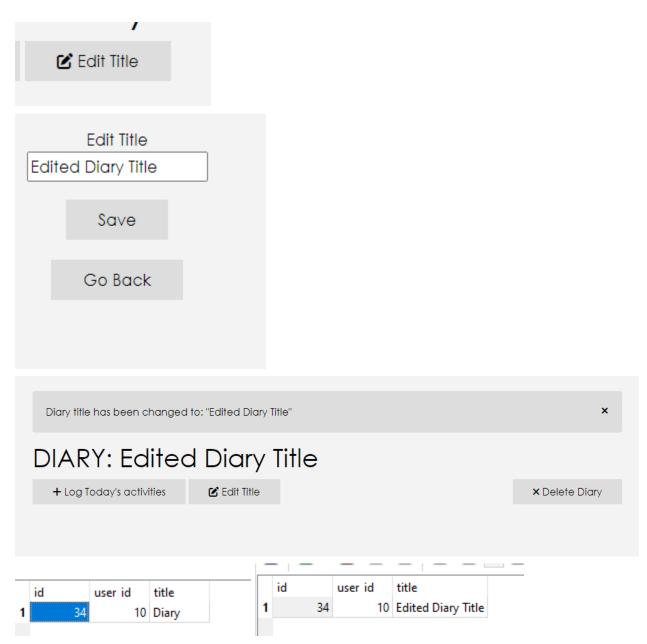


**Testing entry delete** 



# DELETEING ENTRY FOR "September 27, 2022" Are you sure you want to delete this entry? This entry cannot be recovered once deleted. Go Back Deleted entry for "September 27, 2022" DIARY: Diary + Log Today's activities 🗹 Edit Title × Delete Diary id user id diary id date notes entry no longer exists.

Editing diary title.

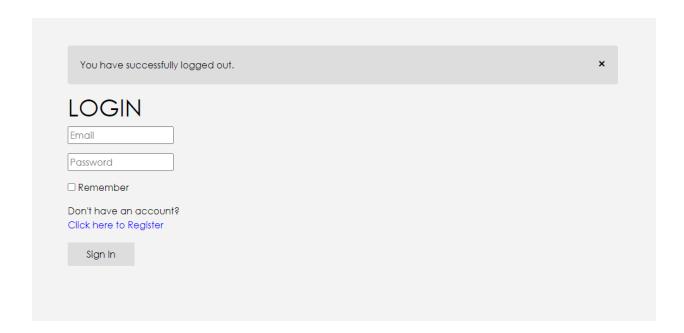


id 34 has been changed from title has been changed from "diary" to "edited diary title"

### **Testing logout**



Route takes me back to the login screen.

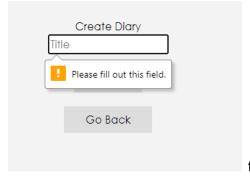


Testing what happens when I add an existing tag to an entry.



Tells the user the tag is already associated with the entry.

Testing when nothing is entered into the title for creating a diary.



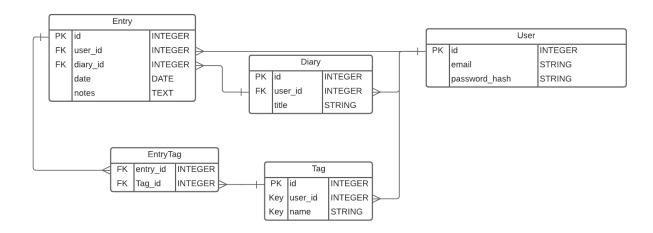
tells the user to fill out the field. passes the testing.

Testing when nothing is entered into tag adding box



tells user to fill out the field, passes testing.

### Database changes due to testing



Removed Exercises because it would be impossible to manage a database where users can interact with other user's exercises, malicious code could be injected into the exercise which could cause someone to lose control of their computer.

Goal setting was not manageable in the time frame set for myself.

Added tags so that it would be easier to see basic information of what you did during that day without clicking on the entry.

Removed activity table because, adding times require user to enter times would be difficult to make sure that one end time > start time.

Website changes due to testing.

All pretty true to the design. However, as having everything on one page would require javascript I decided to split everything off to different pages. It is also best practice to only have one form per page, as the program cannot differentiate between the forms well.

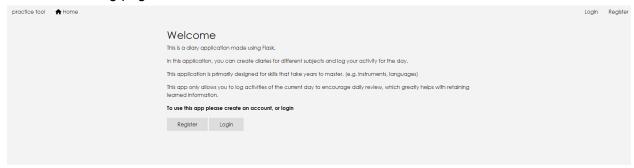
I removed the dropdown to manage user settings and logout, as there is not really much to configure with this website. And having a dropdown for just logout is adding complexity for no reason.

Dashboard has been replaced with an index page telling the user what the website is used for, dashboard would require.

Mr Dunford's comments

"User greeting? Dumped straight to a login page with no information about the site or what its for... secret society?"

I added a landing page so that the user knows what the website is for and how to use it.



"Tell everyone to go to the diary list - why not just send them there."

The user is now redirected to the diary list instead of the home page.

"Not immediately apparent I should click on bob or whatever diary?"

I added a flash message to tell the user to click the title of the diary to open it. When the user has not created any diaries I've added a flash message to tell them what to press to create one.



multiple same tag adds possible - ???

Added a flash message to show the user that the tag is already associated with the entry that they are trying to add to.



### Relevant Implications

### **Database Relevant Implications**

Intellectual property - is a category of property which includes intangible creations, copyrights, trademarks, patents, etc. Other people will not be able to use your intellectual property unless given explicit permission by the creator. Creations of the mind, as the primary use of a website is to record what you did during the day, it is reality and not a creation of the mind. I am not sourcing any text or images from anywhere else therefore my website does not infringe on the copyrights of any creators.

Sustainability and Future Proofing - refers to whether the database is designed so that it will remain functional in the future. In this case, my database is designed so that it can adapt to changes in my project. My database has different tables for entries and diaries so they can be dynamically added to the database without slowing down the system. By organising data into a related table; we eliminate redundancy and increase the integrity which improves performance of the query.

Privacy - My website does not store any personal information besides email, and notes. (Tags could possibly be considered personal information" This information is password protected and hashed so they wouldn't be able to see the information without logging in first.

### Web relevant implications

Aesthetics - refers to how the website looks to the user. It may include things like layout, colour scheme and fonts. Maintaining good aesthetics is important because it can create good impressions for the user and increase the effectiveness of the website. My website addresses

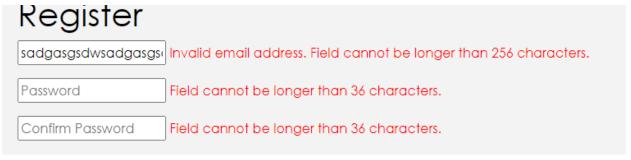
this by using minimalistic and simplistic colours and fonts that are easy for the user to read. It also uses a logical layout and attracts the user's attention to the more crucial information in the centre while leaving the not so crucial information such as navigation and searching stuff, on the top. The navigation bar on the side, main content next to it, header at the top and footer at the bottom makes it easy for the user to navigate through the pages with colours and fonts that are easy to read from.

Usability - refers to the user's experience involving consistency, error prevention and efficiency. Having a usable website is important as keeping things consistent and preventing errors is key to keeping a good user's experience. My website addresses this by having features to prevent errors e.g when a user does not properly fill out a field in my search bar, a notice will come up warning them that what they have put in is not suitable, this prevents an error from occurring. I have also kept my website consistent, whenever you hover over something clickable, it will make the background darker showing that it's a link to a new page.

### Relevant conventions

**Usability Heuristics** 

**Help users recognize, diagnose, and recover from errors** - I have warnings put in place to warn users when input by the user does not reach the requirements. E.g when a user enters something with more than 36 characters, it will display a message asking for less than 36 characters.



**Match between system and the real world** - Diaries are laid out in a list ordered by when they were made, which is an accepted sorting method. Entries are sorted in descending order with most recent at the top and oldest at the bottom, this is common practice among other diary apps.

**User control and freedom** - have easy to access exits when pop ups show up, so the user doesn't feel trapped and feels like that they are in control. My website does this by having easy and clear exits.

Go Back

**Consistency and standards** - making sure that the user should not have to wonder what each thing does, and force them to learn something new. When the user hovers over the thread the

**Visibility of system status** - the design should keep the user informed when something is happening. In my website this is addressed when a user hovers over a link to a new page or a item on the main part of the page, the item is then greyed out and the user knows that something might happen if they click on it.

### **Sprints**

### Sprint 1

Goal: Create my Register page and Login page for my website and make sure it works. Creating models. Make sure navigation to other pages works.

What	Code	Results	Pass/ Fail
Creates a register page with working forms that redirects to the login page when correct information is entered.	+ @app.route("/register", methods=['GET', 'POST']) + def register(): + if current_user.is_authenticated: + return redirect(url_for('index')) + form = RegistrationForm() + if form.validate_on_submit(): + user = models.User(email=form.email.data, username=form.email.data) + user.set_password(form.password.data) + db.session.add(user) + db.session.commit() + flash('You are now a registered user.') + return redirect(url_for('login')) + return render_template("register.html", form=form) - class RegistrationForm(IsasForm): - username = %tringFild('Username', validator=(DetaRequired(), length(exac-250)), render_twn("placeholder": "Password") - password = Password(sid('Password', validator=(DetaRequired(), length(exac-250)), render_twn("placeholder": "Password') - password = Password(sid('Password', validator=(DetaRequired	Register  Email  Password  Confirm Password  Register  Already have an account? Click here to Login	Pass

```
@@ -0,0 +1,16 @@
                              1 + {% if form.username.errors %}
                               2 + 
                                       {% for error in form.username.errors %}
                               3 +
                                          {{| error }}
                               5 +
                                         {% endfor %}
                               6 + 
                               7 + {% endif %}
                               8 +
                               9 + <form class="register" method="post">
                              10 + {{ form.csrf_token }}
                              11 + {{form.username}}
                              12 + {{form.email}}
                              13 + {{form.password}}
                              14 + \{\{form.password2\}\}
                              15 + <input type="submit" value="Go">
                             16 + </form>
Creates a
                          29 + @app.route('/login', methods=['GET', 'POST'])
                                                                                                                                            Pass
                                                                                                             LOGIN
                          30 + def login():
login page
                          31 + if current_user.is_authenticated:
                                                                                                             Email
with working
                          33 + form = LoginForm()
34 + if form.validate_on_submit():
                                                                                                             Password
forms that
                          35 + user = models.User.query.filter_by(username=form.username.data).first()
36 + if user is None or not user.check_password(form.password.data):
redirects to
                                                                                                             Remember
                                         flash('wrong password or username')
the index
                                                                                                             Don't have an account?
                          38 +
                                                                                                             Click here to Register
                                   login_user(user, remember=form.remember_me.data)
flash('Logged in successfully.')
                          39 +
page when
                                                                                                             Sign In
                                    next = request.args.get('next')
correct
                                   if not is_safe_url(next, allowed_hosts="localhost:5000"):
information is
                                        return abort(400)
                          44 + return redirect(next or url_for('index'))
45 + return render_template('login.html', form=form)
entered.
                          Templates/login.ntml
                                   @@ -0,0 +1,7 @@
                             1 + <form class="login" method="post">
                             2 + {{ form.csrf_token }}
                                       {{form.username()}}
                             4 + {{form.password()}}
                              5 + {{form.remember_me()}}
                              6 + <input type="submit" value="Go">
                             7 + </form>
                          usermane Scringfield("Usermane", validators=[OataRequired(), Length(maxx256)], render_lus=("placeholder": "Usermane"))

password = Password*[sld("Password", validators=[OataRequired(), Length(maxx36)], render_lus=("placeholder": "Password"))

renember_me = Booleanfield("Remember Me")

submit = Submitfield("Sign In")
Test to see
                                                                                                                                            Pass
                          + @login_manager.user_loader
                                                                                                             Hi <Usertest@test.test>!
whether user
                          + def load_user(id):
is logged in
                                 return models.User.query.get(int(id))
when
redirecting to
the index
                          + @app.route('/', methods=['GET'])
page
                          + @login_required
                          + def index():
                                 return render_template('index.html')
```

```
... @@ -0,0 +1,7 @@
                               1 + {% extends 'layout.html' %} {% block content %}
                                2 + {% if current_user.is_authenticated %}
                                3 + Hi {{ current_user.username }}!
                                4 + {% endif %}
                                5 +
                                6
                                7 + {% endblock %}
Creating
                                                                                                                                                            Pass
models
                                     from unicodedata import name
                                     from sqlalchemy import ForeignKey
                                 3 from app import db
                                 4 from werkzeug.security import generate_password_hash, check_password_hash
                                    from flask_login import UserMixin
                                 6 from datetime import datetime
                                 8 class User(UserMixin, db.Model):
                                        id = db.Column(db.Integer, primary_key=True, nullable=False)
                                11
                                        preferences_id = db.Column(db.String, ForeignKey('Preferences.id'))
                                        username = db.Column(db.Text, nullable=False)
                                12
                                        email = db.Column(db.Text, nullable=False, unique=True)
                                13
                                       password_hash = db.Column(db.Text, nullable=False)
                                        def set_password(self, password):
                                 17
                                            self.password_hash = generate_password_hash(password)
                                18
                                 19
                                       def check password(self, password):
                                           return check password hash(self.password hash, password)
                                20
                                21
                                       def __repr__(self):
                                           return '<User{}>'.format(self.username)
                                25 class Type(db.Model):
                                26
                                       __tablename__ = 'Type'
                                27
                                        id = db.Column(db.Integer, primary_key=True, nullable=False)
                                        type = db.Column(db.String, primary_key=True, nullable=False)
                                28
                                    class Preference(db.Model):
                                 32
                                        id = db.Column(db.Integer, primary_key=True, nullable=False)
                                33
                                        preference = db.Column(db.String, nullable=False)
                                34
                                35 class Exercise(db.Model):
                                        __tablename__ = 'Exercise'
                                         id = db.Column(db.Integer, primary_key=True, nullable=False)
                                       type_id = db.Column(db.Integer, nullable=False)
                                 39
                                        name = db.Column(db.String, nullable=False)
                                 40
                                        description = db.Column(db.String, nullable=False)
                                        is_public = db.Column(db.Boolean, nullable=False)
                                41
                                42
                                 43 class Diary(db.Model):
                                        __tablename__ = 'Diary'
                                        id = db.Column(db.Integer, primary_key=True, nullable=False)
                                        user_id = db.Column(db.Integer, ForeignKey('User.id'), nullable=False)
                                 47
                                        date = db.Column(db.Date, nullable=False)
                                48
                                        start_time = db.Column(db.Time, nullable=False)
                                        end_time = db.Column(db.Time, nullable=False)
                                49
                                50
                                        notes = db.Column(db.Text)
                                51
                                 52 class DiaryExercise(db.Model):
                                        __tablename__ = 'DiaryExercise'
                                         id = db.Column(db.Integer, primary_key=True, nullable=False)
                                55
                                        diary_id = db.Column(db.Integer, ForeignKey('Diary.id'))
                                         exercise_id = db.Column(db.Integer, ForeignKey('Exercise.id'))
```

Checking to	7 lines (7 sloc)   156 Bytes	• <u>Dashboard</u>	Pass
see if links	1 The topnav 2 <div class="topnav"></div>	• <u>Diary</u>	
show up and	3 <ul></ul>		
work.	4 <li>4 <li>4 = (1) \( \text{A} \) \</li></li>		
	6		
	7		

Sprint 2 Goal: Get text area and make diaries, entries to work and display the data correctly.

What	Code	Results	Pass/Fail
Making diaries display on the page	<pre>@app.route('/diary/cint:id&gt;', methods=['GET', 'POST']) @login_required def diary(id):     diary = models.Diary.query.filter_by(user_id=current_user.id, id=id).all()     return render_template('diary.html', diary=diary)  {% extends 'layout.html' %} {% block content %}  <div id="wrapper">     <div class="grid-container">         <div class="item1"></div></div></div></pre>	Covieris conditions	Pass
Displaying entries with the times.	<pre>{% extends 'layout.html' %} {% block content %}  {% for diary in diary%} Diary: {{diary.title}}  <a href="{{url_for('delete_diary', id=diary.id)}}">delete this diary</a>  <a href="{{url_for('edit_diary', id=diary.id)}}">edit title</a>  <div class="grid-container">  {% for entry in diary.entries %}  <div class="entry">  <pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre> <pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></div></div></pre>	Procupation and in the self-life  2019-12-02  hours: 22-59-59 22-59-59  hours: 22-59-59 23-59-59  hours: 23-59-59 23-59-59	Pass

Displaying individual entries and their notes.	<pre>@app.route('/entry/cint:id&gt;', methods-['GET', 'POST']) @login_required def entry(id):     form = Entryform()     entry = models_Entry.query.filter_by(user_id=current_user.id, id=id).first_or_404()     if form.validate_on_submit():         entry.notes = form.notes.data         db.session.momet()     form.notes.data = ontry.notes     return render_template('entry.html', entry-entry, form-form)  [X extends 'layout.html' X] {% block content X}    <a href="" id='entry.diary.id)}}"' {url_for('diary',="">back</a> <form class="entry" method="post">     {{ form.csrf_token }}  <div class="entry" method="post">     {{ form.csrf_token }}  <div class="entry_info">     &lt;{{ entry.date}}. {% for activity in entry.activities X}     <entry.date}.< p=""> {{ form.start_time }}  {{ form.start_time }}  {{ form.end_time }}  </entry.date}.<></div> </div>                                 <th>Double to a service of proclee; 23.99.9 23.99.99 23.99 23</th><th>Pass</th></form></pre>	Double to a service of proclee; 23.99.9 23.99.99 23.99 23	Pass
Create diary	<pre>@app.route('/diary/create', methods=['GET', 'POST']) @login_required   def create_diary():     form = Diaryform()      if form.validate_on_submit():         diary - models.Diary(user_id-current_user.id, title-form.title.data)         db.session.add(diary)         db.session.commit()         flash('Created new Diary')         return redirect(url_for('index'))     return render_template('create_diary.html', form-form)</pre>	Create Diary Title Create	Fail won't add to the database.
Create diary	<pre>@app.route('/diary/create', methods=['GEI', 'POSI']) @login_required def create_diary():     form = Diaryform()     if form.validate_on_submit():         diary = models.Diary(user_id=current_user.id, title=form.title.data)         db.session.add(diary)         db.session.commit()         flash('Created new Diary')         return redirect(url_for('index'))     return render_template('create_diary.html', form=form)</pre>	Create Diary Title Create	Pass merge makes it add to database.
Create entries	<pre>@app.route('/entry/<int:ids', 'post'])="" @login_required="" create_entry(id):="" db.session.commit()="" db.session.merge(entry)="" def="" entry="Entoyfors():" entry-entry,="" entry_notes="form.notes.data" form="Entoyfors():" form-form)<="" form.notes.data.commit()="" form.validate_on_submit():="" if="" methods="['GET'," pre="" render_template('entry.html',="" return=""></int:ids',></pre>		

```
Delete entries

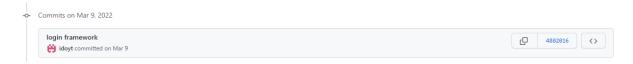
| app.route(/entry/delete/int:ido*)
| felete_entry(id):
| entry_to_delete_entry_to_delete_entry_to_delete)
| entry_to_delete_entry_to_delete)
| do_ession_comit()
| flab/entry_post_uss_delete(entry_to_delete)
| do_ession_comit()
| flab/entry_post_uss_delete(entry_to_delete,diary_id))
| exception_comit()
| flab/entry_post_uss_delete(entry_to_delete,diary_id))
| exception_comit()
| flab/entry_post_uss_delete(entry_to_delete,diary_id))
| exception_comit()
| flab/entry_to_delete/diary_id=entry_to_delete,diary_id))
| exception_comit()
| diary_sould_id=entry_to_delete,diary_id))
| form_to_intry_to_delete,diary_to_delete,diary_id))
| diary_sould_id=to_ession_entrie_delete,diary_id)
| diary_sould_id=to_ession_entrie_delete,diary_id)
| flab/entrie_entrie_delete,diary_id=entrie_delete,diary_id=entrie_delete,diary_id)
| flab/entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_entrie_e
```

Sprint 3
Goal: Work on error handling. Make Flash messages and HCI.

What	Code	Results	Pass/Fail
Testing flash message	<pre>calv class* Column ploate &gt;</pre>	Indignation and I LOGIN Indignation and I Cogin I Cogi	Pass

```
Making sure
                                                                                                                  Pass
                         <h1>Register</h1>
                                                                                       Register
                                                                                       sagagasg
the it shows
the errors
with the form
                       {% for error in form.email.errors %}
                        <span style="color: red;">{{ error }}</span>
to the user.
                       {% endfor %}
                       Already have an account?<br>
                       <a href="{{url_for('login')}}">Click here to Login</a>
                       {% endblock %}
Adding
                                                                                                                  Pass
                                                                                        DELETEING DIARY: "Diary"
pages
                                                                                           Are you sure you want to delete this diary?
This diary cannot be recovered once deleted.
confirming
that they
want to
delete certain
entries
                                                                                                                  Pass
Making an
index page
showing what
the purpose
of the
website is.
```

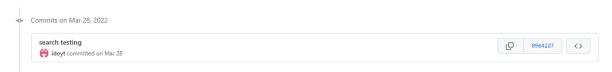
Iterative improvement



On Mar 9, 2022 I created my login framework with flask, flask forms, and sqlalchemy.



On Mar 14, 2022 I did some styling of my pages to make them look better and added a navigation bar to test my routes.



On Mar 28, 2022 I created a search function to see if I could search for keywords in my diary notes.



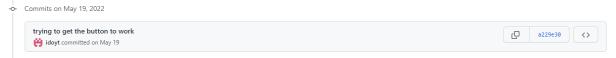
On May 9, 2022 I created a pop-up used to create new diaries, and displayed the created diaries on the main page, I also styled the login and register pages.



On May 10, 2022 I tried creating a button that would show the diary data and disappear afterwards so that I could dynamically load the data.



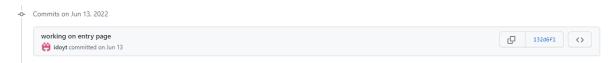
On May 18, 2022 working on the same thing as the May 10, 2022 trying to dynamically load the form.



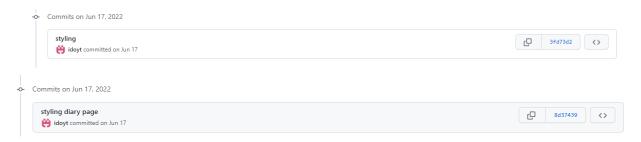
On May 19, 2022 I scrapped the idea to dynamically load the data and opted to use a button to navigate to the diary page.



On May 20, 2022 and May 23, 2022 I styled my website, to make sure that elements do not overlap each other, and created a handler for when an unauthenticated user tries to access pages that require the user to be logged in.



On Jun 13, 2022, creating more fields in forms and making them show up on the entering entries page.



On Jun 17, 2022 styling for diary list and entry list and created a grid to display the diaries.



On Jun 24, 2022 removed the route where I tried to use js to load the entry data. Removed some of the fields to simplify the website so I can complete it in time.



On Jun 27, 2022 I tried to query the entries pertaining to a particular diary by querying the entries and the diary individually and listing all the entries where the id of the diary was the same as the id of the diary\_id in the entry table.



created a create diary page
diacyt committed on Jul 15
doy't committed on Jul 15

On Jul 15, 2022 I created a page to create new diaries.



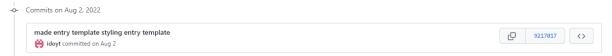
On Jul 16, 2022 I experimented with sqlalchemy relationships to link tables together.



On [Jul 18, 2022] I changed the query so that I could also display the title of the diary so the user would know what diary they were in.



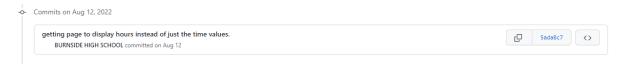
On Jul 29, 2022 I turned the diary titles into links and made them take the user to the diary page.



On Aug 2, 2022 I made a page that lists all the entries and a page that shows the notes and more detailed information of the entry.



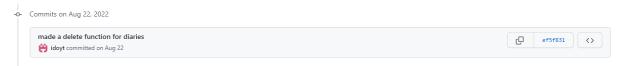
On (Aug 10, 2022) I tried to update the notes by querying the entry and using "db.session.update" parsing the text entered in the field which did not work.



On Aug 12, 2022 I tried using custom filters to parse the entered time values into hours, but it required me to use datetime to use the filter which would make, if I stored the data as datetime i would be repeating the date so I decided to remove activity as it would be too difficult to implement.



On Aug 19, 2022 I tried "entry.notes = form.notes.data" to edit the entry notes, which still didn't work because of a session error, merging fixed that error. Also making the previously entered data show up in the field would not update this because I called the object too early, moving it to the bottom of the function fixed it.



On Aug 22, 2022 I made a delete function for Diaries. I edited the models so that it would delete all related entries when the diary was deleted.



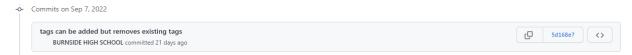
On Aug 25, 2022 I made a function to edit the diary title.



On Sep 1, 2022 I fixed all my queries to delete/edit/view that were not functional.



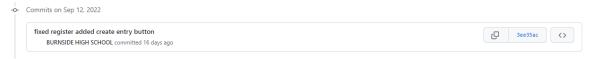
On Sep 5, 2022 I created a requirements and a run.bat which would install all the required packages from the requirements files and run my website. I also started working on a tagging system to increase the complexity of my website and make it easier for the user to tell what's inside the entry before they open it.



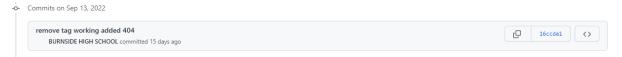
On Sep 7, 2022 I got the tag system to work, however existing tags would be deleted as all the relationships for the entry would be overwritten. This was because I was getting the row object and creating a new entry every time instead of getting the existing object.



On Sep 9, 2022 I fixed the issue by getting the existing entry rather than creating a new one.



On Sep 12, 2022 my register was broken because I had used the wrong variables in the models page with my check and set password. I also created a route that would create a entry for the current day.



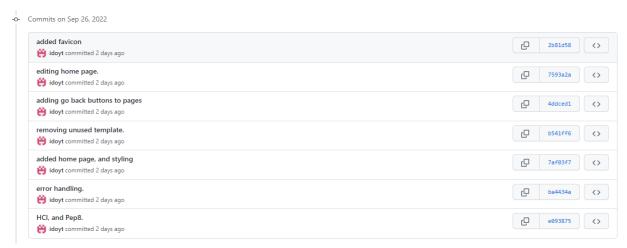
On Sep 13, 2022 I got the remove tag to work but I later realised that removing one tag from an entry would remove the same tag from another entry. I added a 404 page and handler.



I changed my design from a grid layout to a singular column layout and listed all the diaries like that.



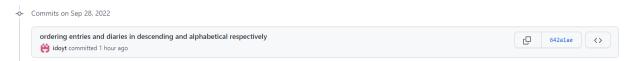
From Sep 24, 2022 to Sep 25, 2022 I worked on getting a flask flash to show messages to the user when they enter a field incorrectly and when they've logged in successfully.



On Sep 26, 2022 I worked on setting out my code properly, commenting on what each function did and individual portions of the more complex functions. I remove any unnecessary objects and create error handlers for 401 and 500 errors. I added a homepage detailing what the website is used for and added a favicon.



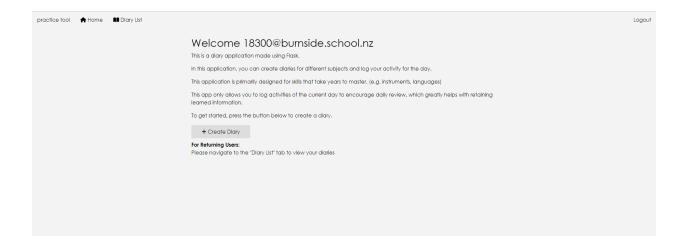
On Sep 27, 2022 I fixed a typo which fixed the create tag function. I did some pep8 formatting on my other python files.



On Sep 28, 2022 I made sure that the entries and diaries were sorted in descending order and alphabetical order respectively.

Final Iteration of Project

Home



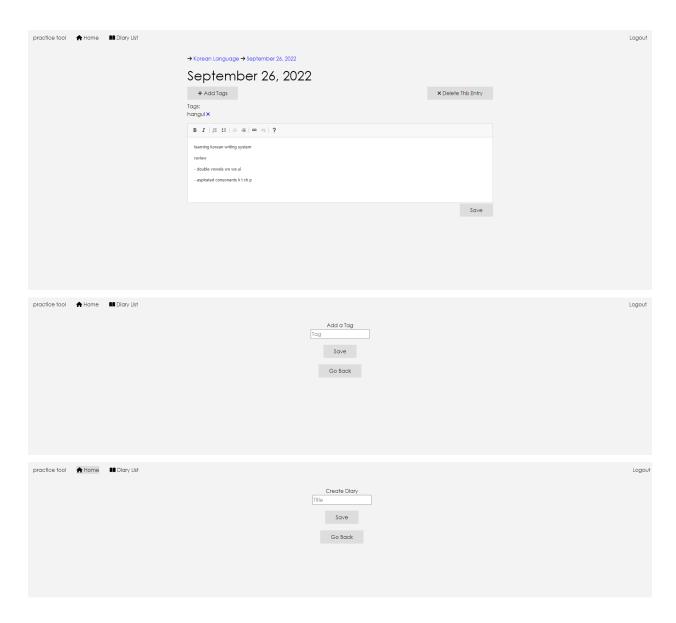
## **Diary Index**



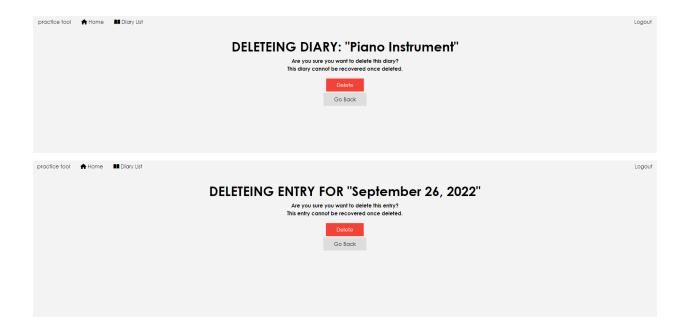
## Diary



Entry



Deleting Rows in the database



## Authentication

