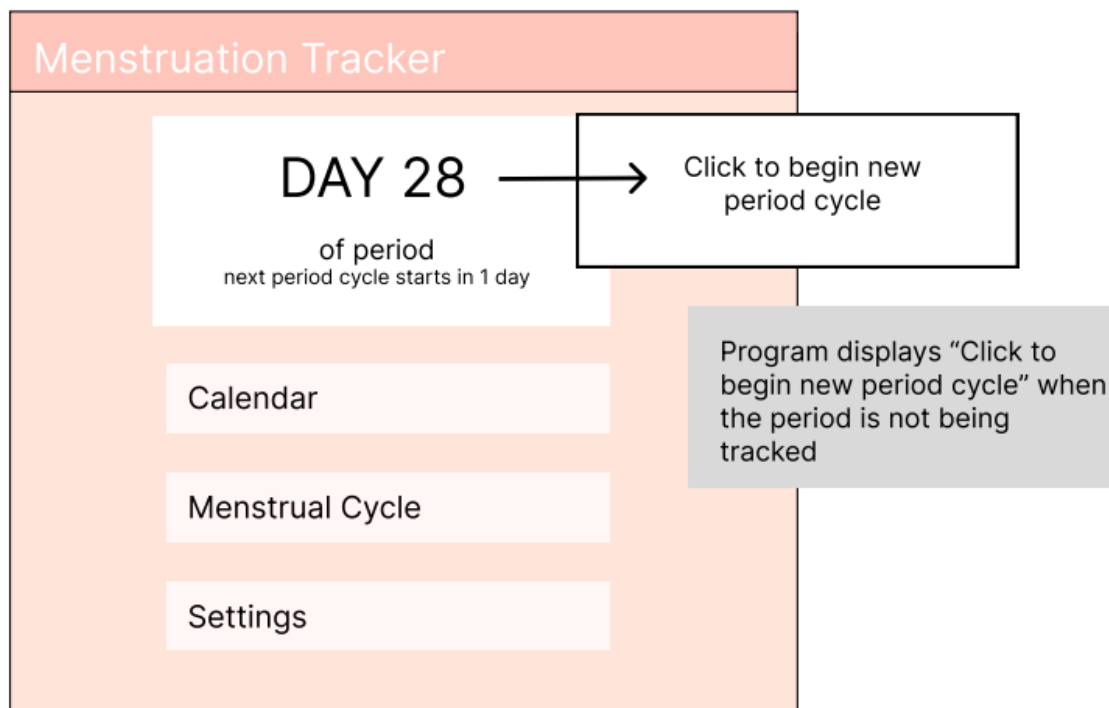
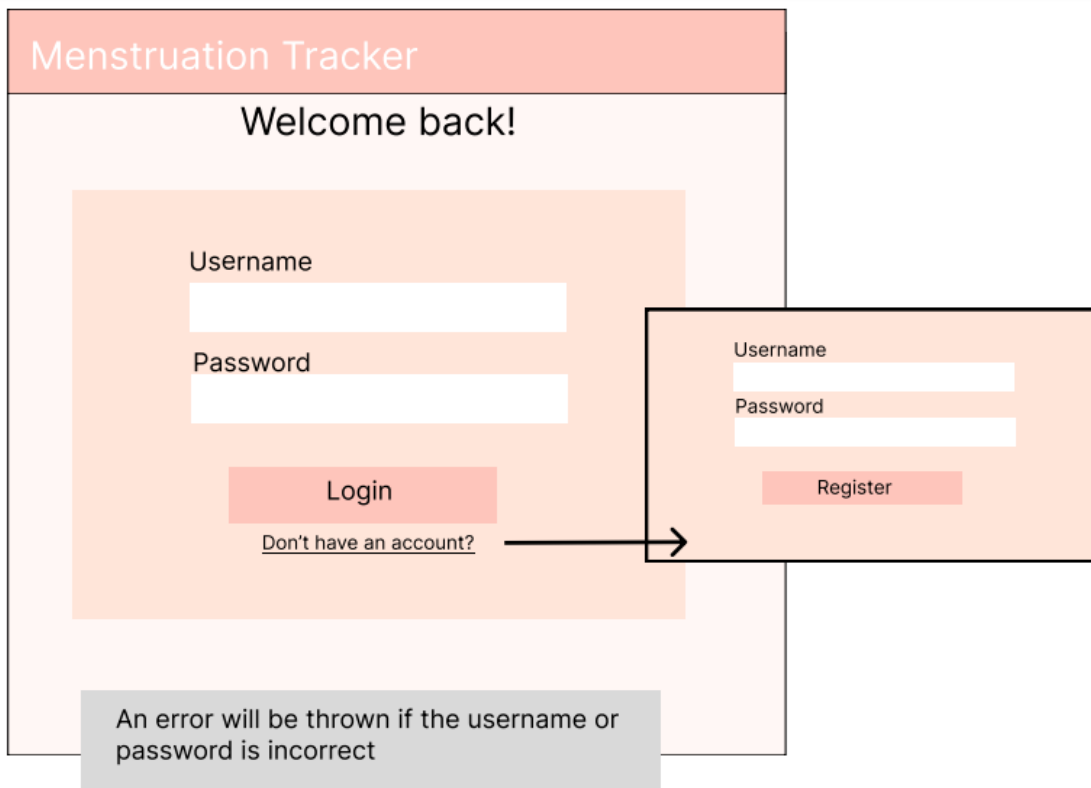
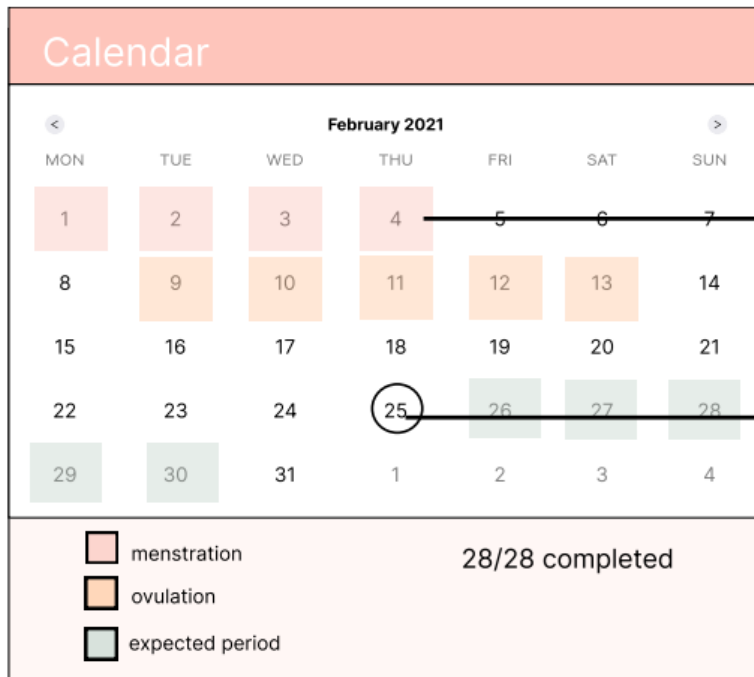


Software Design





End period

Add notes

Symptoms

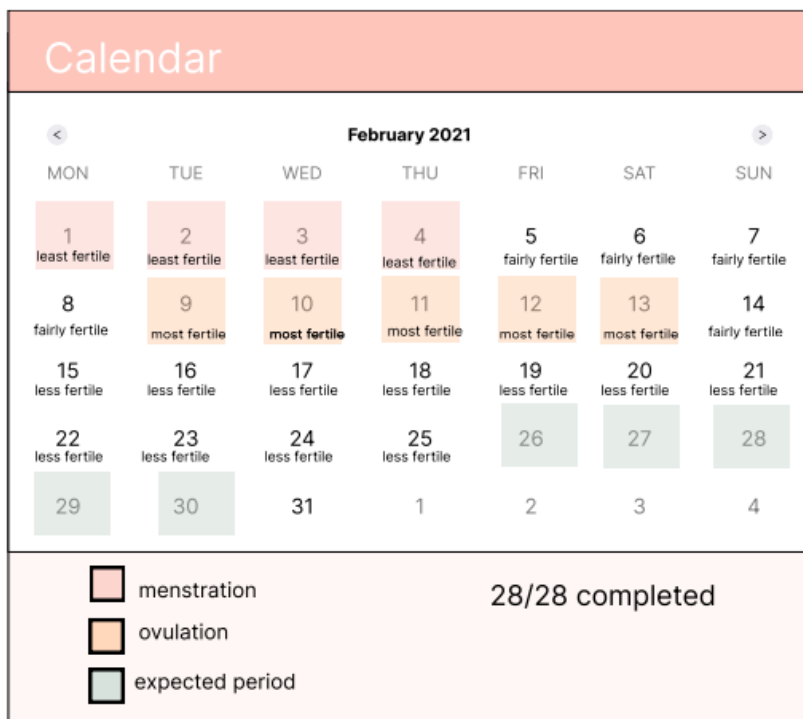
User may select "end period" during menstruation

Start period

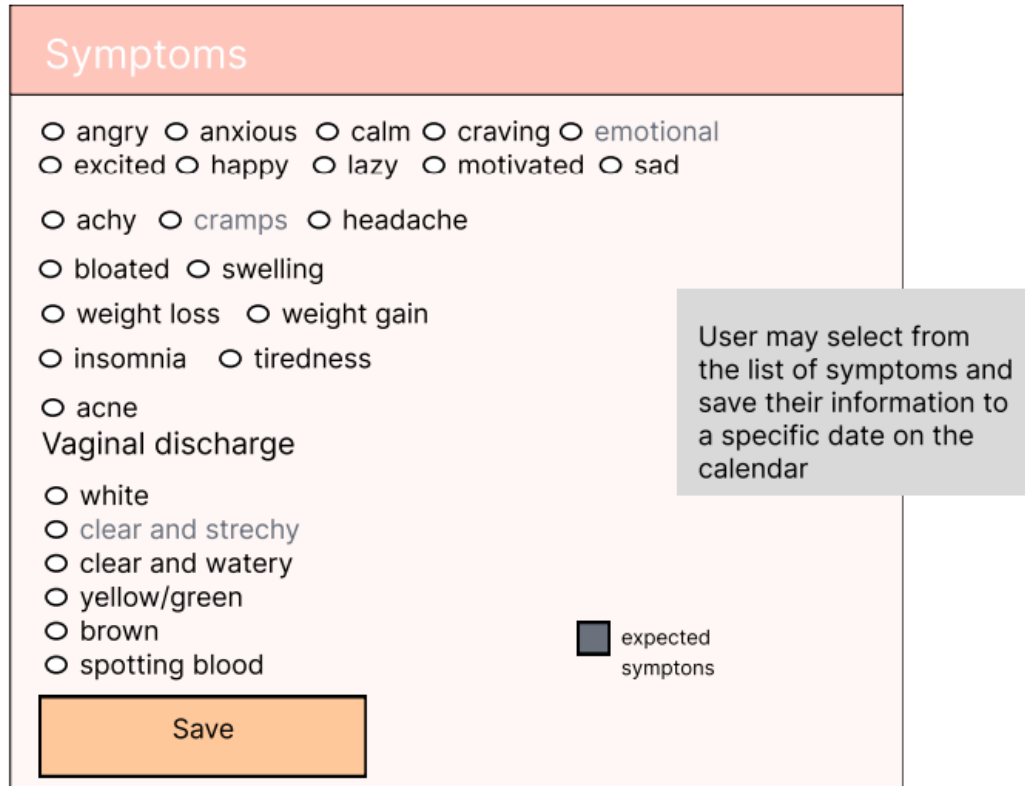
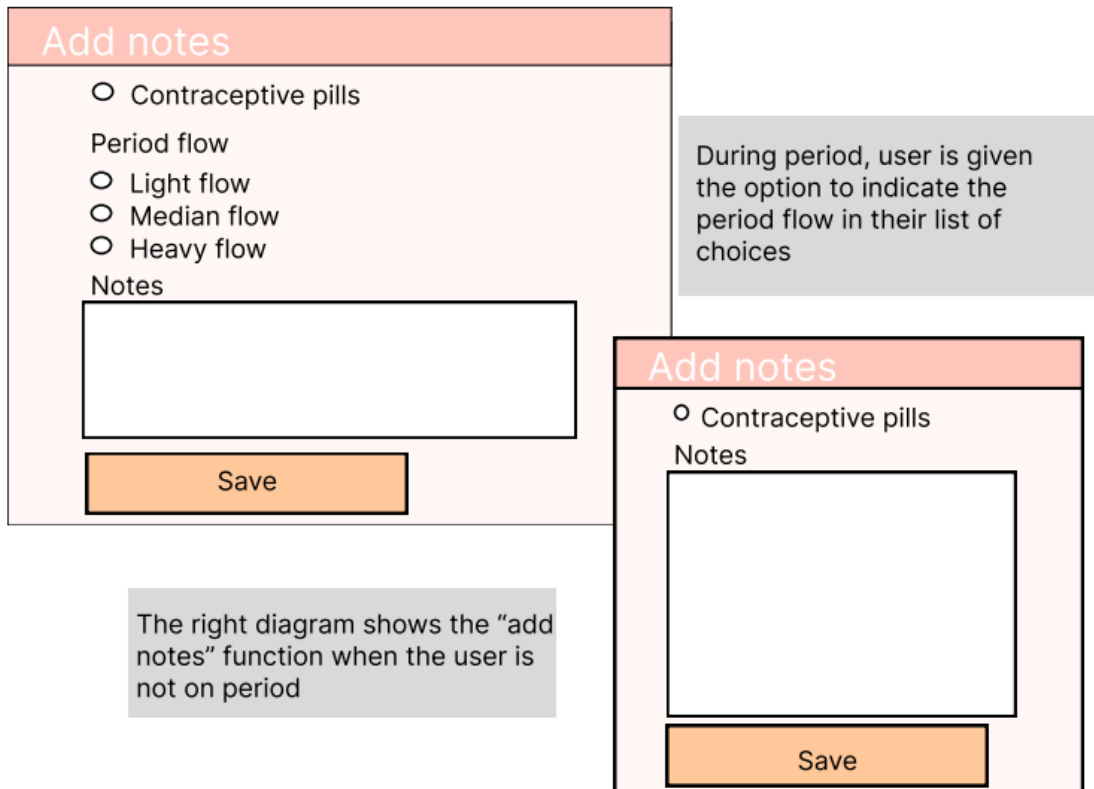
Add notes

Symptoms

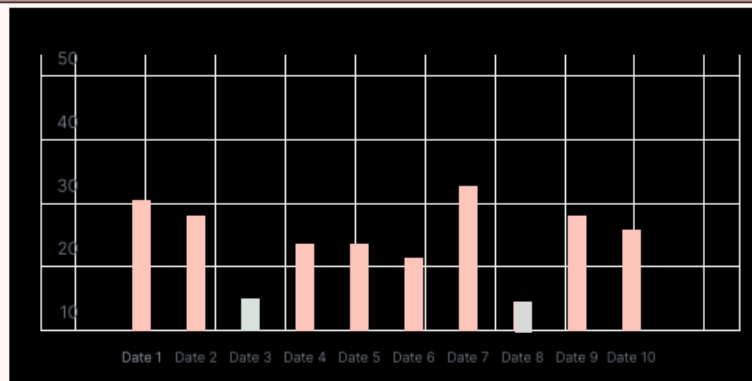
Otherwise, user may choose the option "start period"



When the option, "preparing for pregnancy" is selected, the calendar displays levels of fertility throughout the months



Menstrual Cycle



Date	Duration
MM/DD/YYYY	26
[...]	27
	10*
	32
	21
	22
	22
	12*

*Abnormal period cycles: shorter than 21 days
or longer than 35 days

Dates of the period will be recorded down inside the table and the graph, along with their corresponding lengths and frequencies

Settings

- ☐ During pregnancy/breastfeeding
- ☐ Preparing for pregnancy

Cycle length (21-35 days):



Period length (2-7 days):

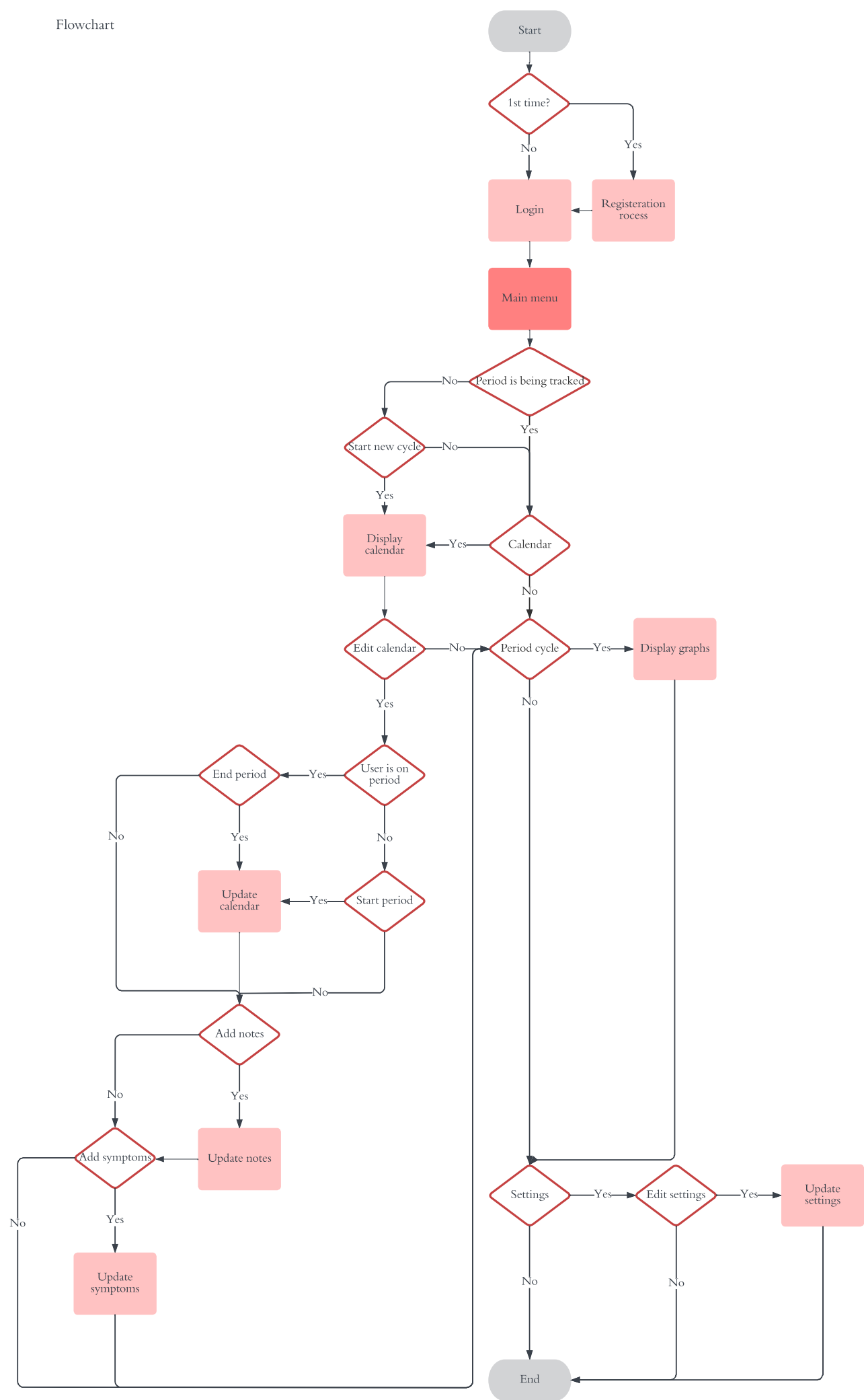


Save

Changes to the settings can be saved and adopted by the program

User may drag along the slider to adjust the cycle length and the period length

Flowchart



Product Development lan

Choice - Function	Comments
Login page <ol style="list-style-type: none"> 1. Login 2. Registration 	<ol style="list-style-type: none"> 1. Prompt user for username and password. 2. When using the program for the first time, the user may click “Don’t have an account?” to register.
Main menu <ol style="list-style-type: none"> 1. Directing the user to calendar/menstrual cycle/settings 	<ol style="list-style-type: none"> 1. Allow the user to access different components of the program through the main menu.
Calendar <ol style="list-style-type: none"> 1. Display calendar 2. Add/edit/delete dates of period 3. Add/edit notes 4. Add/edit symptoms 	<ol style="list-style-type: none"> 1. Display the calendar with the current date. 2. Add/edit/delete dates of period <ol style="list-style-type: none"> a. When the user is not on period, they may select the “start period” option. b. When the user has chosen that they are on period, they may change it by selecting the “end period” option. 3. User may indicate details of their period cycle and add personalized notes. 4. User may select and save their symptoms.
Calendar <ol style="list-style-type: none"> 1. Mark menstruation/ovulation 2. Display period cycle 3. Display expected symptoms 	<ol style="list-style-type: none"> 1. Display menstruation/ovulation with different colours. 2. Display the completed and expected days of the period cycle. 3. Expected symptoms are highlighted on the list of symptoms that the users may select.
Menstrual cycle <ol style="list-style-type: none"> 1. Display table and graph 2. Mark irregular period 	<ol style="list-style-type: none"> 1. Display table and graph of organized data, showing the period lengths and frequencies over time. 2. Mark dates on which the period occurred abnormally on the table.
Settings <ol style="list-style-type: none"> 1. Pregnancy/breastfeeding option 	<ol style="list-style-type: none"> 1. Provide pregnancy/breastfeeding options which pause the tracking of

2. Preparing for pregnancy option 3. Display/edit period length and cycle length	period. 2. Provide the “preparing for pregnancy” option to show user’s different levels of fertility on the calendar. 3. Allow the user to adjust the period length/cycle length with a slider.
Additional 1. Display completion of period cycle 2. Display expected days until the next cycle 3. “Click to begin new period cycle” option	1. Display the number of days completed in the current cycle on the main menu. 2. Display the number of days remaining until the next cycle on the main menu. 3. If the pregnancy/breasting mode is on, or if the user hasn’t inputted any period data, display the option “click to begin new period cycle”.

Test Plan

Test Number	Description	Input data/ Instructions	Expected Results
1	Run the program	Click on the program icon	Program opens
2	Registration function	Select “Don’t have an account” and input username and password	The username and the corresponding password are stored
3	Login function	Enter the pre-registered username and password	After the username and password are confirmed, access to the program is granted to the user
4	Main menu	Click on the different buttons on the main menu	The buttons lead to sperate components of the program
5	Display calendar	Click on the calendar option on the main menu	Display calendar with the current date
6	Provide options for	Click on the	Show option of

	the user to edit on the calendar	individual date of the calendar	adding notes and symptoms. When the user is on period, provide the option to end the period, otherwise, provide the option to start the period
7	Edit period dates	Click on end period/ start period	End or start the period on the calendar. Store the length of the period cycle
8	Edit notes/symptoms	Click on add notes/symptoms	Allow user to edit notes/symptoms. Store the inputted information on each date
9	Calculate and predict the dates of period & ovulation	Click on the calendar option on the main menu	Using the stored information, calculate and show different colours for days/expected days of ovulation or period. Display the completion of the cycle
10	Display expected symptoms	Click on the symptoms option	With a different colour, highlight the symptoms expected to happen according to the stage of period cycle
11	Display graph and table	Click on the menstrual cycle option from the main menu	Using the stored information, display inputted period cycles using the format of a table and a graph
12	Pause period tracking	Register for the first time/ click pregnancy or breastfeeding	Stop displaying prediction for expected period dates

		option	and pause the progression of the cycle
13	Preparing for pregnancy	Click the “preparing for pregnancy” option in the settings	Display fertility levels on the calendar according to the calculated period stages
14	Change period frequency/length	Adding new period dates/changing the period lengths on settings	Change the stored period lengths and frequencies
15	“Click to begin new period cycle” function	Click the option on the main menu	Redirect user to calendar
16	Close function	Click to exit program	Exit the program

Record of Tasks

Task number	Planned action	Outcome	Time spent	Completion date	Criterion
1	Come up with an idea for the internal assessment	I have identified the suitable topic (menstruation tracker) for my internal assesement	1 week	9/21/2022	A
2	Decide on the appropriate client	My sister became my client	1 day	9/22/2022	A
3	Decide on the appropriate advisor	A family friend of mine has become my advisor	2 days	9/24/2022	A

4	An interview with the client	My sister and I have discussed the possible functions of the product	1 day	9/25/2022	A
5	An interview with the advisor	I contacted my advisor online. We discussed the feasibility of my project to further formulate the plan	1 day	10/1/2022	A
6	Deciding on the programming language used for this program	Java is chosen to be the programming language of this project	1 day	10/1/2022	A
7	Complete the IA proposal	I have written the overview of my planned project and handed it in for teacher's review	5 days	10/28/2022	A
8	Adjust the IA proposal according to teacher's feedback	I have adjusted the format of the proposal and added more descriptions revolving around my choice of the client	1 day	11/8/2022	A

9	Designing the product and making a prototype	Diagrams were created online to illustrate the basic outline of my project	3 days	11/18/2022	B
10	Create a flowchart	Flowchart is created to describe the solution design more clearly	2 day	11/20/2022	B
11	Create a product development plan & test plan	Plans were created according to the proposal	3 days	11/24/2022	B
12	Complete the IA design	All the plans and diagrams created were finalized	1 day	11/25/2022	B

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