Your Project Requirements and/or Scope of Work

Below are the requirements we have gathered thus far. We have decided to create an API (Application Programming Interface) for the calculations table on the backend. This will allow you to also easily create other applications in the future (on other platforms such as the web or in other mobile operating systems).

LIPOCALCULATOR© by Henry Mentz, MD, Houston, Texas

1. Legal Disclaimers

**MOBILE APPLICATION DEVELOPMENT PROPOSAL 2 0 1 7**

* 1. a. When a user first downloads the app, and opens for the first time, they will need to accept terms and conditions. The client will provide the language for this.
  2. b. On subsequent opens, the home screen will have some text about the app and the C\_a\_p\_r\_i\_n\_i\_ \_s\_c\_o\_r\_e\_,\_ \_a\_n\_d\_ \_w\_i\_l\_l\_ \_a\_g\_a\_i\_n\_ \_m\_e\_n\_t\_i\_o\_n\_ \_t\_h\_a\_t\_ \_u\_s\_e\_r\_s\_ \_h\_a\_v\_e\_ \_a\_g\_r\_e\_e\_d\_ \_t\_o\_ \_“T\_e\_r\_m\_s\_ \_a\_n\_d\_ \_C\_o\_n\_d\_i\_t\_i\_o\_n\_s\_” \_(\_l\_i\_n\_k\_ \_t\_o\_ \_t\_h\_e\_ \_T\_e\_r\_m\_s\_ \_a\_n\_d\_ \_C\_o\_n\_d\_i\_t\_i\_ons page).

a. Burger Menu Bar on top left

i. Menu options

1. Home

2. About (static text about Dr. Mentz and the app – \_client will provide the text for this page)

3. Disclaimer (static page with a list of resources users can look up for additional information – \_client will the text for this page)

4. Resources (static page with a list of resources users can look up for additional information – \_client will the text for this page)

b. As mentioned above, the home screen of the app will have some text about what the app is and does and have a link to Terms and Conditions the user has agreed to.

c. Then it will have a “Start Survey” button

* 1. a. There will be a total of 4 screens with questions and then 2 screens for results

i. Screen 1 Questions (Title: Patient Height/Weight/BMI)

1. Surgeon experience: (dropdown with)

a. <99 cases

b. 100-999 cases

c. > 1000 cases

2.Height in Inches a. Textbox (scroll up and down, default at 66 inches)

* 1. 3. Weight in Pounds a. Textbox (scroll up and down, default at 150 lbs)
  2. 4. Height in Meters (will auto calculate if height entered in inches or vice versa)

5. Weight in Kilograms (will auto calculate if weight entered in pounds above or vice versa)

6. Body Mass Index (BMI): will auto calculate based on height and weight (here is how the calculation is done: http://extoxnet.orst.edu/faqs/dietcancer/web2/twohowto.html)

7. Previous button on bottom left

8. Next button on bottom right

ii. Screen 2 Questions (Title: Procedures)

1. Age: dropdown with:

a. 18-39

b. 40-59

c. 60-74

d. > 75

2. Number of Liposuction Areas dropdown with:

a. 1 to 3

b. 4 to 7

c. > 7

3. Estimated Liposuction amount: dropdown with:

a. Less than 5 liters

b. Greater than 5 liters

4. Estimated Time: dropdown with:

a. 0-45 minutes

b. 46-239 minutes

c. > 240 minutes

5. Combined Procedures: checkboxes for:

a. Abdominoplasty

b. Body or Thigh Lift

c. Breast or Facial Surgery

6. Previous button on bottom left

7. Next button on bottom right

iii. Screen 3 Questions (Title: Patient History)

1. Previous Heart Attack: Toggle yes/no

2. Previous Stroke: Toggle yes/no

3. Family History or Previous Deep Vein Thrombosis (DVT), Pulmonary Embolism (PE): Toggle yes/no

4. > 3 Lost Pregnancies: Toggle yes/no

5. Recent Surgery Less than 30 Days: Toggle yes/no

6. Congestive Heart Failure (CHF) or Lung Disease/COPD: Toggle yes/no

7. Previous button on bottom left

8. Next button on bottom right

iv. Screen 4 Questions (Title: Autoimmune and/or Other Illnesses)

1. Personal or Family History of test indicating increased blood clotting: Toggle yes/no

2. Taking Hormones in the last 3 weeks: Toggle yes/no

3. Traveling more than 3 hours in the last 2 weeks: Toggle yes/no

4. Inflammitory Bowel Desease (IBS): Toggle yes/no

5. Patient BMI greater than 35? (This field should show the BMI generated in screen 1 and should auto-answer the question (Toggle yes/no))

6. Previous button on bottom left

7. Next button on bottom right

v. Screen 5 (Results Screen 1 of 3): (Title: Liposuction Limits, Results 1 of 3) would like first screen to include display of these in green

1. Fat Aspirate Limit:

a. Calculation: =(0.05\*(patient height in meters))\*(patient weight in kg)\*(1-(-patient adjusted % total/100))

b. Display: \_\_\_\_\_\_ Liters Suggested Maximum Aspirate

2. Tumescent Fluid, L

a. Calculation: = patient weight in lbs \*0.1

b. Display: (number, round to whole number) \_\_\_\_\_\_\_ Liters Suggested Tumescent Maximum

3. IV – Use Maintenance Plus Additional Fluids:

a. Calculation: =0.25\*(fat aspirate limit-5)\*1000, but only if positive number

b. Display: \_\_\_\_\_\_ ccs by IV in addition to maintenance

4. Chemoprophylaxis

a. Calculation:

i. If DVT total is less than 2, then display “Consider Postoperative Chemoprophylaxis”

ii. If DVT total is greater than 2, then display “Recommended Postoperative Chemoprophylaxis”

5. Overnight a. Calculation:

i. If Overnight total is equal to 0, display “Consider Overnight Observation”

ii. If overnight total is greater than 0, display “Recommended Overnight Observation”

vi. Screen 6 (Results Screen 2 of 2): Title (Tumescent Formulation, Results 2 of 3)

1. Lidocaine 1%, cc per L

a. Calculation: None

b. Display: Add 20 cc 1% Lidocaine per Liter

2. Epinephrine 1:1000, cc per L

a. Calculation: None

b. Display: Add 1 cc 1:1000 Epinephrine per Liter

3. Triamcinolone

a. Calculation: None

b. Display: Add 1 cc 10mg/cc Triamcinolone per Liter

3. Tumescent Fluid, L

a. Calculation: = patient weight in lbs \*0.1

b. Display: (number, round to whole number) \_\_\_\_\_ Liters Suggested Tumescent Maximum

4. Total 1% Lido ccs

a. Calculation: = Lactated Ringers, L value \* 1% Lido, cc per L value

b. Display: number (round to whole number) \_\_\_\_\_\_ ccs 1% Lidocaine in Tumescent Formula

5. Lido Max 1% ccs

a. Calculation: = patient weight in kg \* 3.5

b. Display: number (round to whole number) \_\_\_\_\_\_ ccs 1% Lidocaine Maximum

vi. Screen 6 (Results Screen 2 of 2): Title (Liposuction Care, Results 3 of 3) (static page with a list of recommendations for liposuction care– \_client will the text for this page)

1. Discontinue Hormones 3 weeks prior
2. Medical clearance for patients at risk and over 50 years old
3. 5 day MRSA prep if at risk
4. Preop cleansing with home antibacterial soap / shower and preop antibacterial wipes
5. Prewarm / Prehydrate patient with warm IV fluids warming blankets
6. IV antibiotics prior to the incisions
7. Foley catheter for cases longer than 180 minutes
8. Intraop warming and reprep as necessary
9. Reevaluate and reassess as necessary

6. Export Button on bottom middle of screen: will allow user to email or text message the results (screen 1 through 6. to themselves or someone else. The export needs to be in a nice format.

7. Previous button on bottom left

8. Start Over button on bottom right (if clicked, this will clear all fields and take user back to screen 1)

1. 5. Previous button on bottom left
2. 6. Next button on bottom right