

# ***Fuel Density Calculator App***

**Gammon Technical Products**

**March 9<sup>th</sup>, 2015**



## **Abstract**

Gammon Technical Products wishes to have a mobile application for both iOS and Android that calculates the ideal density of airplane fuel in a simple, easy to use interface. The application will capture Gammon Technical Products' commitment to building innovative, secure, state-of-the-art products. This app will take user input as necessary and return the calculated ideal density of airplane fuel. The app will be built in accordance with Gammon Technical Products' brand, and provide more information about the fuel density calculation as well as Gammon Technical Products itself.

## **Required Functionality**

### **Mobile Application (iPhone and Android)**

- API Gravity Calculator: Calculates API Gravity at 60°F
- Relative Density Calculator: Calculate relative density/specific gravity at 60°F
- Density Converter: Calculate ideal density based on API Gravity
- Temperature Converter: Convert Fahrenheit to Celsius and vice-versa
- Display reference information about calculator
- Provide resources to contact and learn more about Gammon Tech

## **Specifications**

### **Mobile Application**

- Clean & beautiful launch image with Gammon Technical Product's logo
- Design in accordance with Gammon's branding

### **Main Screen**

- Choose one of four calculator options: API Gravity Calculator, Relative Density Calculator, Density Converter, and Temperature Converter
- Button to page with information about the calculator
- Button to page with information about Gammon Tech

### **API Gravity Calculator**

- Two inputs: API Gravity, Fuel Temperature (°F)
  - Output: API Gravity at 60 °F

### **Relative Density Calculator**

- Two inputs: Relative Density, Fuel Temperature (°F)
  - Output: Relative Density/Specific Gravity at 60°F

### **Density Converter**

- Input API Gravity, and lbs/gallon (weight/volume)
  - Output: Density (US or SI)

### **Temperature Converter**

- °F to °C (and vice versa)

### **Gammon Resources Screen**

- Display general information about Gammon Technical Products

- Contact information
  - Link to Apple Maps
  - Allow user to call Gammon Tech directly from the app
- In-app browser with link to [gammontech.com](http://gammontech.com) for more information
- In-app browser with link to [gammontechstore.com](http://gammontechstore.com) to browse company product

### **Fuel Density Calculator Reference Screen**

- Provide further information about the fuel density calculation and the calculator

## **Gray Matter**

- Gammon Technical Products takes pride in selling their products internationally, and therefore may want to consider providing support for other languages.
- Gammon Technical Products may want to consider support for deprecated screen sizes such as the iPhone 4/4s and earlier

## Budget

### Mobile Application Development\* – Billing rate \$60 per hour

Functionality	Development Time (hours)	Cost
Application architecture and navigation	4	\$240
API Gravity Calculator	5	\$300
Relative Density Calculator	5	\$300
Density Converter	3	\$180
Temperature Converter	3	\$180
Gammon Tech Resources	3	\$180
Fuel density calculator FAQ	2	\$120
App publishing fee	Flat rate	\$500
<b>25 + flat rate</b>		<b>\$2,000</b>

### Additional Costs – Billing rate \$60 per hour

Functionality	Development Time (hours)	Cost
Calculator derivation	6	\$360
Testing and Quality Control	4	\$240
Legal fees*	TBD	-
<b>10</b>		<b>\$600*</b>

### Total Cost

Item	Development Time (hours)	Cost
iOS Application Development	25 + flat rate	\$2,000
Android Application Development	25 + flat rate	\$2,000
Additional Costs*	10 + flat rate	\$600
<b>Total</b>	<b>50 + \$1500</b>	<b>\$4,600*</b>

\*Final cost depends on additional legal fees

## **Team Breakdown**

Ryan Nam: CEO of Namkour

- Ryan is overseeing the project and facilitating discussions between Namkour and Gammon Tech

Max Friedman: Project Manager and Senior iOS Developer

- Max will be the point of contact between Gammon Tech and Namkour
- He will build the iOS version of the fuel density calculator, and oversee development of the Android version as well
- Contact information:
  - Email: maxfriedman422@gmail.com
  - Cell: (603) 440-3380

Michael Gasparovic: Senior Android Developer

- Michael will take the lead on Android development for the fuel density calculator



## **Conclusion**

Namkour is excited to have the opportunity to work with Gammon Technical Products on this unique and intriguing project. As such, Namkour would like to offer a total packaged price of **\$4,600**. This price does not include the items listed in “Gray Matter,” and is pending any additional legal fees.