AMRITA VISHWA VIDYAPEETHAM

birth buddy
Moral Guide to Pregnancy & Childbirth

Birth Buddy – Personal Moral Guide to Pregnancy & Childbirth

CODE BOT

Team : **Amrit Subramanian** | **Mounish** | **Madhav**

Technologies used:

Html5

Css3

JavaScript

Django / Python

Bootstrap V 5.4

LLM - Openai [Api Linkage]

Abstract

Pregnancy and childbirth can be a very exciting and fulfilling experience for many women, but it can also be overwhelming, confusing, and even scary at times. That is why having a "birth buddy" or personal moral guide can be helpful during this journey. A birth buddy is someone who can provide emotional support, offer advice and guidance, and help you make informed decisions about your pregnancy and childbirth experience. This document will provide an overview of what a birth buddy is, why having one is important, and how to choose the right person to be your birth buddy.

Introduction

Pregnancy and childbirth are significant milestones in a woman's life. The process of carrying a child and giving birth can be both exciting and daunting. Many women experience a range of emotions during this time, including joy, anxiety, fear, and uncertainty. It is important to have a support system during this time to help navigate the challenges that may arise.

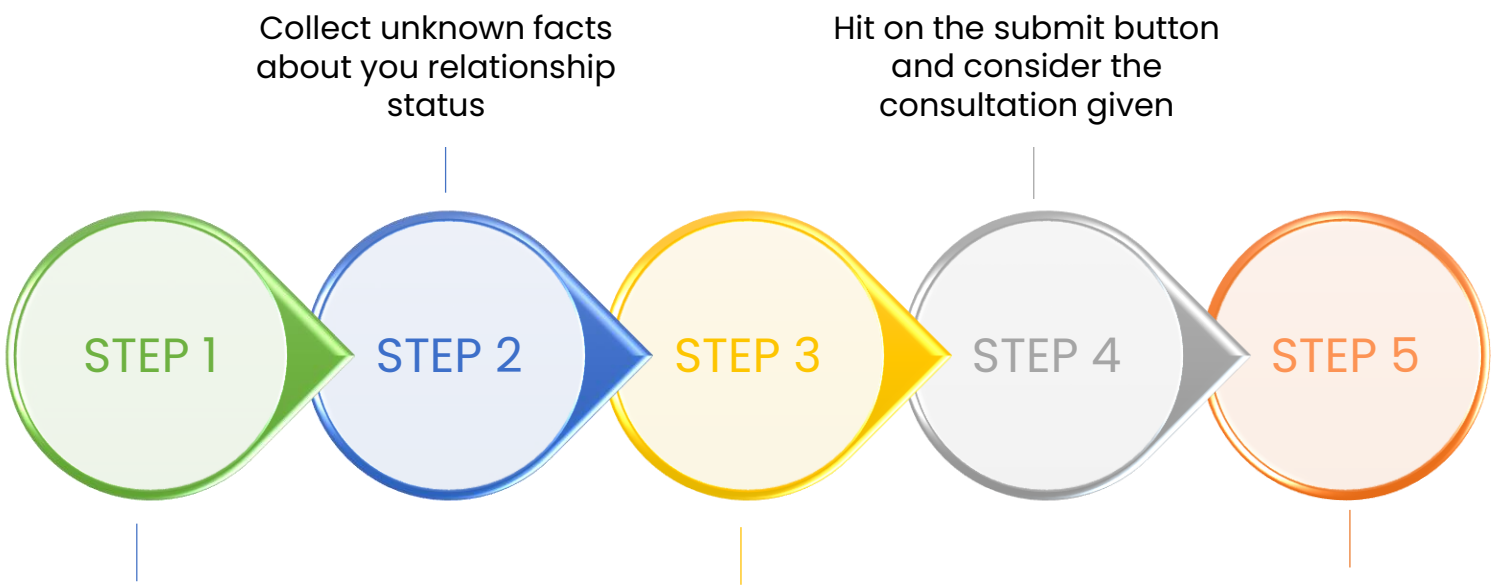
A birth buddy is someone who can offer support and guidance during pregnancy and childbirth. This person can be a friend, family member, or a trained professional such as a doula. A birth buddy can help you prepare for childbirth, offer emotional support, and advocate for your wishes during labor and delivery.

Personal moral guide to Pregnancy & Childbirth

CONSTRAINTS PROCESSED FOR PROFESSIONAL GUIDANCE

Guidelines To Use This App

CONSIDERING BABY? VISIT US



Our USP

- This one of a kind technology/application makes statements with more precision as it's trained for everything
- No dedicated birth advisory systems have been made which only uses LargeLanguageModel (LLM)
- The idea put behind is unique and exclusive for this project.
- User Friendly design

Concept behind this

As we strive towards building a better future for our communities, it is important to prioritize the well-being of our families. As a team, we have developed an innovative application on Django that helps individuals make informed decisions about whether or not to have a child based on their current financial situation.

Using prompt engineering and the Davinci text 003 language model, our application provides personalized assessments of an individual's ability to support a child. By considering a range of financial factors, such as income, expenses, and savings, our application provides reliable recommendations that help individuals make informed decisions about their future.

We believe that by prioritizing family planning and providing access to resources and support, we can ensure a better future for our communities. We are proud to be part of an effort that prioritizes the well-being of families and supports individuals in making informed decisions about their future. Thank you for your support and consideration.

Prompts to install - python libraries(which were used)

1. pip install openai
2. pip install django

Prompt design – Helper Function

Source Code:

```
import openai

# hiding the confidential info from un-authorised users
with open("childcare/api_key.txt") as jammer:
    api_key_read = jammer.read()

parameters = {"temperature": .5, # more lower it is more creative it becomes -> value can range only
from 0->1
              "max_tokens": 512, # 2^9
              "model": "text-davinci-003" # existing LLM on openai libray
              }

def renderPrompt(mom_dad_age: tuple, mom_dad_medical_ailments: tuple, collective_renumeration: float,
country: str, married: bool, care_givers: bool, both_educated: bool, rapport_desc: str):
    # integrating api key
    openai.api_key = api_key_read

    prompt = F'''
```

INSTRUCTION:

1) say yes or no in one word to have a baby after analyzing the given constraints given below

a)-> mom's and dad's age [try to relate c section with moms age and medical ailment]

b)-> mom's and dad's medical ailments [if they have some suggest cure else appreciate them for being health]

c)-> their yearly earnings combined in usd[compare this with especially the country they live in for avg money needed to raise a child]

d)-> their maritial status [if married be a bit positive else be a bit negative in a subtle way]

e)-> if they have caregivers good else explain why do they have to have one

f)-> country they live in [use countries demographics, efficacy of pregnancy technologies in the country and infant moratlity rate for saying yes/no and the countries literacy rate aswell]

g)-> if they are educated give them potential problems they could have in future, if not educated explain the potential problems in a simpler way [list out the problems they may face in having a child]

h)-> Analyze their current rapport as a description will be given on it and say whats wrong and whats right in having a child in their live scenario

2) generate 8 paragraphs for the corresponding topics given above on your yes/no answer for the above question [start and end paragraphs with # im going use it for regex processing]

template:

Old's Gold but lets talk age

a)#content#

Gotta be healthy?

b)#conten1t#

Need to be a bit lucrative?

c)#content#

Goodness in exchanging rings

d)#content#

Necessity of an extra hand

e)#content#

Do you have to think about your Environment?

f)#content#

Children are cool, but lets talk the goodhead aches they give

g)#content#

Lifestyle and rapport

h)#content#

EXAMPLE:

Based on the information provided, my recommendation is YES, you can have a baby! Let's break down the analysis for each constraint.

#Old's Gold but let's talk age

At 28 and 32, the parents are in a good age range for starting a family. While older mothers may have a higher risk for C-section, the age of the mother is not a concern at this point.

#Gotta be healthy?

There are no medical ailments to worry about for either parent, so that's great news! Keep up with regular check-ups and a healthy lifestyle to ensure a smooth pregnancy.

#Need to be a bit lucrative?

With an annual combined income of $100,000, the parents should be able to provide a comfortable life for their child. It's important to note that the cost of raising a child varies depending on where you live, but in general, it's doable with their income.

#Goodness in exchanging rings

Being married is a positive factor in starting a family. It provides a stable foundation for the child's upbringing and ensures a strong commitment from both parents.

#Necessity of an extra hand

Having caregivers in place is a great idea. Raising a child can be challenging, and having an extra hand can make a big difference in managing daily tasks.

#Do you have to think about your Environment?

The USA is a developed country with advanced medical technology, high literacy rates, and a low infant mortality rate. These factors make it a good environment for having a child. However, it's important to consider the impact on the environment and take steps to reduce waste and carbon footprint for the child's future.

#Children are cool, but let's talk the good headaches they give

Being educated means the parents are equipped to face any potential problems that may arise in raising a child. They may face challenges such as balancing work and family life, but with proper planning and support, they can overcome these obstacles.

#Lifestyle and rapport

A smooth lifestyle and respectful rapport between parents bodes well for starting a family. It's important to maintain open communication and work together to make decisions that are best for the child's well-being.

Overall, based on the given constraints, my recommendation is YES, you can have a baby! Wishing you all the best on your journey towards parenthood.

```
INPUT:

    a) mom's , dad's age: {mom_dad_age}
    b) medical ailments mom, dad: {mom_dad_medical_ailments}
    c) annual collective income's {collective_renumeration}
    d) Married: {"yes" if married else "no"}
    e) care-givers: {"yes" if care_givers else "no"}
    f) country: {country}
    g) Educated: {"yes" if both_educated else "no"}
    h) {rapport_desc}

    ........................................
    everything should be direct speech
    make a prediction on abv input by using the instruction given above [ reply in personal tone
use and make it more humaly ]
    '''
```

```
generative_model = openai.Completion.create(
        engine = parameters["model"],
        prompt = prompt,
        temperature = parameters["temperature"],
        max_tokens = parameters["max_tokens"],
    ) # method to contrive api response

    return list(map(lambda x: x[1].replace('\n', '<br>') if x[0] == 0 else x[1].replace('\n',
'<br>').partition('<br>')[2], enumerate(generative_model.choices[0].text.strip().split('#'))))
```

Explanation

The script reads an API key from a file, which is used to authenticate with the OpenAI API. It then sets several parameters for the language model, including the temperature (which controls the creativity of the generated text), the maximum number of tokens to generate, and the model to use.

The script defines a function called renderPrompt, which takes several inputs related to a hypothetical couple's situation, such as their ages, medical conditions, income, marital status, and education level. The function generates a prompt that asks whether the couple should have a baby, and provides eight prompts for paragraphs related to each input. The function then uses the OpenAI API to generate a response to the prompt based on the provided inputs.

The generated response consists of several paragraphs that analyze each input and provide a recommendation based on whether the couple should have a baby or not. Each paragraph is labeled with a heading that corresponds to the input it is analyzing, and is enclosed in a special character sequence to aid in parsing the generated text. The response concludes with an overall recommendation based on the provided inputs.

Overall, the script demonstrates the use of the OpenAI language model to generate responses to complex prompts based on a set of inputs. The generated text is tailored to the specific inputs provided, and provides detailed analysis and recommendations based on those inputs.

Video Walkthrough on the Application

Part1: [Onboarding – how to use the application]

https://share.vidyard.com/watch/FJ3rba8o3ZUbFpELzvr1Wp?

Part2: [code explanation + prompt-design-explanation]

https://share.vidyard.com/watch/CSf4c8GEnSAfLt6guwtxhM

GITHUB repo link

https://github.com/macromrit/BirthBuddy

Conclusion

The project built on Django that utilizes ChatGPT's API key to deploy the LLM (text-davinci-003) is an impressive application that utilizes advanced AI technology to provide advice to couples on whether they should have children or not based on various parameters. The fact that the application considers critical factors such as the couples' age, financial capability, country of residence, and medical ailments is impressive and adds a layer of personalization to the advice provided.

Overall, this project demonstrates the potential of AI technology in providing personalized solutions to complex problems. It also highlights the importance of incorporating technology in decision-making processes to improve their accuracy and effectiveness. With further development, this project could have far-reaching implications for couples seeking advice on family planning and related issues.

References

1. https://docs.djangoproject.com/en/4.2/
2. https://www.linkedin.com/pulse/maximizing-power-gpt-3-effective-prompting-techniques-siddiqui/
3. https://docs.retool.com/docs/openai-integration