FloraCare Documetation*

*An app designed to assist women in easily identifying their vaginal health issues.

1st Apetroaei Cezar-Stefan
TUIASI
Computer Science and Engineering
Iasi, Romania
cezar-stefan.apetroaei@student.tuiasi.ro

2nd Spiridon Ioan
TUIASI
Computer Science and Engineering
Iasi, Romania
ioan.spiridon@student.tuiasi.ro

3rd Alina Tesila & 4th Sara Manolache
ALI CUZA

BIOINGINERIE
Iasi, Romania

I. Introduction

Women's health is increasingly becoming centered around individual empowerment, and technological innovations are introducing solutions that enhance how women manage and monitor their intimate health. In this context, the Flora-Care app emerges as an innovative and valuable tool, aiming to support women in monitoring their health conveniently and effectively.

II. Ease of Use

A. Interface

The interface of Flora-Care is thoughtfully designed, prioritizing simplicity and clarity. Its user-friendly layout ensures that information is presented in a straightforward manner, enabling easy comprehension of health data without complexity.

B. Simplified Functionality

Flora-Care integrates intuitive functionalities, simplifying tasks such as data input, result interpretation, and understanding health implications. By streamlining these processes, the app eliminates barriers to accessing and understanding health insights, ensuring a seamless and uncomplicated user experience.

III. Dataset

A. Data acquisition

The dataset was acquired through images of pH paper, representing all potential pH types found in vaginal secretions. These images were captured at 0, 15, 30, and 60 minutes after application, both with and without flash, aiming to encompass various scenarios encountered by users.

B. Data Augumentation

With Roboflow, we applied data augmentation and preprocessing techniques to enhance this dataset. This includes resizing, rescaling, reshaping, and recropping the images. Additionally, we adjust brightness and contrast parameters to enhance the dataset for improved model training and performance.

IV. Post Processing

Following the classification of pH values, the next step involves correlating these values with survey responses collected from female app users. This correlation aims to ascertain whether there exists a relationship between specific pH levels and the survey outcomes, assisting in determining whether women should consider consulting a doctor. Analyzing survey data in conjunction with pH classifications enables the identification of patterns or associations between reported symptoms, concerns, or observations and pH variations. This correlation aids in creating a more informed recommendation system within the app, empowering women with personalized insights that guide them on whether seeking medical advice based on their reported symptoms or survey responses is advisable.

A. Privacy of data

Ensuring the privacy and confidentiality of female user data within our app is our utmost priority. We employ robust security measures and adhere to strict privacy protocols to safeguard all personal information provided by our users. All data, including survey responses, pH classifications, and any sensitive health-related details, is handled with the highest level of encryption and stored securely on our servers. We strictly limit access to authorized personnel and utilize advanced encryption techniques to prevent unauthorized access or data breaches.

References

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