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## **SkinLab**

Solution to analyse acne the acne severity of the Sri Lankan  
women and manage a natural skincare routine

A dissertation by

**Vishmi M. Liyanage** (W1715764 | 2017421)

Supervised by

**Ms. Shyani Siriwardene, Ms. Salitha  
Dinushika**

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University of Westminster

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## Abstract

Among different skin conditions the most common state of skin can be considered as “Acne”. Acne has become the eighth most prevalent disease worldwide where it affects millions of individuals around the world. Acne is a skin condition which may occur in any stage of life and may continue into an individuals’ 30s and 40s whereas the acne conditions which occurs after the age of 22 is known as “Adult Acne”. Even though adolescence acne is common in both men and women, during adulthood it is more common in women. This may occur due to various internal and external factors whereas it also causes substantial discomfort in individuals, resulting to psychological consequences as well. This skin condition has been highly problematic within Sri Lanka women as it results in not only physical discomfort but also phycological distress as well.

This dissertation focuses on addressing the problems faced by working women within the age range of 18 – 35 who are currently suffering from acne skin conditions in Sri Lanka, by analysing the acne severity and providing natural skincare routines authorized by Ayurvedic specialists. Author analysed the requirements for the solution, limitations and the current system features through an extensive literature review. For further accuracy and confirmation, the findings form literature review were further discussed by conducting interviews and distributing questionnaires among the Ayurvedic specialists and acne patients.

By analysing the gaps in existing systems and understanding the difficulties faced by women in managing their skin and getting medical help for severe skin conditions, the solution “SkinLab” was designed and implemented. This solution will assist them to manage a healthy facial skin by following a specialist authorized natural skincare routines and other lifestyle modification techniques. It will also assist skincare specialist consultation to manage and treat the existing skin conditions to gain a healthy skin.

The implemented solution was evaluated by industry experts as well as non-experts to receive the feedback on the usefulness and the effectiveness of the proposed solution in managing Female Adult Acne in Sri Lanka.

**Keywords:** Adult Acne, Personalized Skincare Routines, Natural Remedies, Online Consultation, Image Processing, Mobile Application