

Martial Arts and Meditation App

by

Joseph Albert D'Costa (193014023)
Tashin Rahman Chowdhury (183014043)
Rudaba Sultana (183014015)

Bachelor of Science in

Computer Science and Engineering

Course title: Smartphone Application Development

Course code: CSE438

Section: 01

Submitted to: Shakib Mahmud Dipto



Computer Science and Engineering
University of Liberal Arts Bangladesh
House 56, Road 4/A @ Satmosjid Road,
Dhanmondi, Dhaka-1209, Bangladesh.
Date: 14/12/2022

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Introduction

Purpose :

- **Self-Defense Training:** Provide individuals with the opportunity to learn and practice martial arts and karate for self-defense.
- **Mental Well-Being:** Promote mental well-being through guided meditation sessions and relaxation techniques.
- **Flexible Learning:** Offer convenient and flexible learning options without fixed class timings or geographical restrictions.
- **Skill Development:** Focus on enhancing physical abilities, mental discipline, and personal growth.
- **Child Development:** Provide age-appropriate training modules to foster discipline, self-confidence, and physical fitness in children.
- **Accessibility:** Ensure that the application is accessible to individuals of all ages, abilities, and backgrounds, promoting inclusivity and equal opportunity.
- **Personal Safety:** Empower users to protect themselves and enhance their personal safety in potentially dangerous situations.
- **Stress Relief and Mental Relaxation:** Offer techniques and practices to reduce stress, anxiety, and promote overall emotional well-being.
- **Confidence Building:** Help users build confidence, self-esteem, and assertiveness through martial arts training and meditation practices.
- **Convenience and Time Savings:** Eliminate the need for commuting to physical training centers, saving time and providing convenience for users to train at their own pace and schedule.
- **Continual Learning:** Offer a wide range of courses and modules to support continual learning and personal growth in martial arts and meditation.

Intended audience :

- **Martial Arts Practitioners:** Individuals who practice martial arts regularly and seek an organized way of enhancing and tracking their training. This audience could span all ages and abilities, from novices to experts.
- **Fitness Enthusiasts:** People who aim to improve their physical and mental fitness, seeking varied workout routines. This includes beginners

who want to explore martial arts as a new form of exercise, as well as seasoned fitness enthusiasts looking to diversify their workouts.

- **Meditation Practitioners:** Individuals of any age seeking to improve their mental health, increase their focus, or reduce stress and anxiety through mindfulness and meditation.
- **Wellness Coaches and Personal Trainers:** Professionals in the field of fitness and wellness who require a comprehensive tool to guide their clients in martial arts and meditation techniques.

Intended Use:

- **Training and Exercise-** The application will provide a variety of martial arts training routines, ranging from beginner to advanced levels, allowing users to improve their martial arts skills and physical fitness.
- **Meditation and Mindfulness** - The application will offer guided meditation sessions to help users enhance their mental health and wellbeing, improve focus, and reduce stress and anxiety.
- **Educational Resource** - The application will serve as a comprehensive guide for martial arts and meditation techniques, providing detailed instructions, videos, and tips.

Definitions & Acronyms:

- **Online Martial Arts and Meditation (OMAM):** The proposed mobile application that combines martial arts training and meditation practices, providing users with a convenient and flexible platform for learning and personal growth.
- **Self-defense:** The practice of techniques and strategies to protect oneself from physical harm or danger, which includes martial arts techniques for combat and personal safety.
- **Meditation:** A practice that involves training the mind to focus and redirect thoughts, leading to a state of mental clarity, relaxation, and emotional well-being.
- **User:** Any individual who accesses and utilizes the OMAM application for learning martial arts, practicing self-defense, and engaging in meditation sessions.
- **Modules:** Distinct courses or lessons within the OMAM application that focus on specific martial arts techniques, self-defense strategies, or meditation practices.
- **Holistic Health:** A comprehensive approach to well-being that considers physical, mental, and emotional aspects, aiming to achieve balance and harmony in all

aspects of life. The OMAM application aligns with the principles of holistic health by combining martial arts and meditation for overall wellness.

- **User Interface (UI)**: The graphical layout and interactive elements of the OMAM application that enable users to navigate, access features, and interact with the content.
- **User Experience (UX)**: The overall experience and satisfaction of users while interacting with the OMAM application, including ease of use, responsiveness, and visual appeal.

Product scope :

The "Online Martial Arts and Meditation" application strives to address the many requirements of those looking to advance their physical and mental well-being, whether it be through self-defense training, meditation, or building community. The product scope for the proposed "Online Martial Arts and Meditation" application encompasses the following points:

- **Learning Karate and Martial Arts**: The program will provide users access to a variety of karate and martial arts courses. Through demonstrations, step-by-step instructions, and instructional films, users may learn different forms, techniques, and self-defense tactics.
- **Meditation Techniques**: The application will provide meditation techniques to support relaxation, stress reduction, and mental well-being. For users to increase their mental acuity and find inner peace, guided sessions, mindfulness exercises, and other meditation approaches are available.
- **Flexible Learning**: Users will be able to study at their own pace and convenience thanks to the application's flexible learning features. Using their cell phones or other devices, they may access the training courses whenever and wherever they are. Users may study while balancing their hectic schedules, and they can meditate and practice martial arts in the comfort of their own homes.
- **Expert Instructors**: The app will include videos and information produced by certified meditation and martial arts instructors. To provide a thorough learning experience, these professionals will give extensive instructions, advice, and insights.
- **Child-Friendly Content**: The app will have material that is especially made for kids, including age-appropriate martial arts instruction and relaxation techniques. This feature strives to ensure children's safety and happiness while giving them a special physical and intellectual skill set.
- **Continuous Updates and Improvements**: Based on user input, new trends, and developments in the martial arts and meditation disciplines, the program will

regularly be updated to provide new courses, methods, and features. Users will always have access to the most recent and pertinent material thanks to this.

- **Accessibility:** The program will put accessibility first by making sure that it is compatible with a range of hardware, software, and display sizes. In order to ensure inclusion, it will also take accessibility elements into account.

Overall description

User needs :

- **Comprehensive Content** - Users need a wide variety of martial arts and meditation techniques from beginner to advanced levels. The content should be accurate, detailed, and engaging, supported by visual aids or video demonstrations.
- **Personalization** - Users need the ability to customize their training and meditation schedules, set personal goals, and track their progress over time. The application should allow users to select their level of proficiency, preferred training intensity, and specific types of martial arts or meditation techniques.
- **Ease of Use** - The application should have an intuitive and user-friendly interface, suitable for all ages and technological proficiencies. This includes clear navigation, simple instructions, and easily accessible support or help features.
- **Security and Privacy**- Users need assurance that their personal information, workout routines, progress data, and any shared experiences within the community are secure and private.
- **Multi-Platform Accessibility**- Users need the ability to access the app from different devices and operating systems without losing functionality, to ensure continuous access to the application's services.

Assumptions and dependencies :

Assumptions:

- **User interest:** The app assumes that there is a target audience interested in martial arts and meditation practices. It assumes that users are seeking a convenient and accessible way to learn and practice these disciplines through a digital platform.
- **Availability of content:** The app assumes the availability of a wide range of instructional and informational content related to martial arts and meditation. This could include videos, tutorials, guided meditations, articles, and more. The assumption is that there is enough content to provide a comprehensive learning experience.
- **User motivation and commitment:** The app assumes that users are motivated and committed to learning and practicing martial arts and meditation. It assumes

that users will actively engage with the app, follow the instructions, and invest time and effort into their practice.

- **Technical infrastructure:** The app assumes the availability of a stable internet connection and compatible devices (such as smartphones or tablets) for users to access and use the app effectively. It assumes that the necessary technological infrastructure is in place to support the app's features and functionalities.

Dependencies:

- **Content creators and experts:** The app depends on martial arts and meditation experts who create and provide the content for the platform. These could be experienced instructors, trainers, or practitioners who develop the instructional videos, guided meditations, and other educational materials.
- **Platform development and maintenance:** The app depends on a team of developers, designers, and technical experts who build and maintain the platform. They are responsible for creating an intuitive user interface, ensuring smooth functionality, and addressing any technical issues or updates.
- **Quality and accuracy of content:** The app depends on the quality and accuracy of the content provided. It relies on the expertise and credibility of the content creators to deliver accurate and reliable information on martial arts techniques, meditation practices, and related topics.
- **Legal and copyright considerations:** The app depends on adhering to legal and copyright regulations. It must respect intellectual property rights for the content it provides and ensure that any licensed material is used appropriately and with proper permissions.

The system

System features :

- User registration;
- Course selection ;
- Video playback and interactive learning module;
- Meditation;
- Video content streaming.

Functional requirements :

- **User registration :** Allow users to create accounts and provide necessary information for personalized experiences.

- **User profile management** : Enable users to update their profiles, including personal details.
- **Video content streaming** : Provide seamless streaming of martial arts and meditation videos for users to watch and learn.
- **Course Selection** : Allow users to choose specific courses or modules based on their interests and skill levels.
- **Search and filtering** : Implement a search functionality to allow users to find specific videos, courses, or instructors based on keywords or filters.

Non Functional requirements :

- **Usability** : The application should have a user-friendly interface and intuitive navigation to ensure ease of use for users of all ages and technical proficiency levels.
- **Performance** : The application should have fast loading times and responsive video streaming to provide a seamless and enjoyable user experience.
- **Compatibility** : The application should be compatible with various devices and operating systems, including smartphones, tablets, and desktop computers.
- **Security** : The application should have robust security measures to protect user data, including encryption of sensitive information and secure authentication processes through email address and password.
- **Scalability** : The application should be designed to handle a growing number of users and accommodate increasing demands for video streaming and user interactions.
- **Reliability** : The application should be reliable, with minimal downtime or disruptions, to ensure continuous access to content and services.

External Interface :

Default / unauthorized user :

- Sign in;
- Register.

User :

- Sign in;
- Sign out;

- Edit profile;
- Video content streaming;
- Course selection;
- Meditation.

Use case diagram :

