

Project Title: SportsHub Abstract Main Project:

The proposed project titled -Sportshub is a comprehensive platform designed for sports enthusiasts and fitness-conscious individuals. Sports Hub provides professional facilities that include the booking space and equipment for sports items such as football, basketball, cricket, tennis, and volleyball for a registered user based on payment. The second category of users consists of fitness enthusiasts who register and use the fitness related resources to achieve their fitness goals. The platform features registered certified trainers who provide personalized training and monitor daily activities as per the schedule and scheme of training type opted by the members with customs provided and specific payment plans. The interface incorporates Al-integrated technology to enable improved fitness monitoring on a regular basis. This innovation is introduced through the cutting-edge virtual assisted gym trainer, powered by Pose Detection ML technology. Users have the option to participate in virtual training sessions, where the AI-powered trainer analyses their workout posture and precision during custom activities in real-time. The system provides alarm feedback on posture violations and offers guidance to optimize performance. Detailed reports are generated to track progress. This advanced feature brings the advantage and convenience of a professional gym trainer, even after the completion of the training program, and can be used directly for home workouts. The proposed system consists of four modules: Admin, Registered Sports User, Registered Gym User, and Registered Trainers.