**<Parking Management System>**

**(Project Proposal)**

**Project Number****:**

**Group No. 7**

**Submitted To:**

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**Submission Date:**

**01-DEC-2024**

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# **Abstract**

Parking management is a crucial issue in urban areas, where growing population and vehicle ownership lead to inefficient use of parking spaces, inefficient traffic and time wasted searching for parking. An effective Parking Management System is required to streamline parking operations, reduce vehicle collisions, and provide an organized approach for parking spaces, ensuring convenience and efficiency for both users and administrators.

# **Problem Statement**

The state-of-the-art problem in parking management is the lack of efficient systems to handle growing numbers of vehicles in urban areas. Drivers often waste time searching for parking, leading to traffic congestion, frustration, and increased pollution. Traditional parking systems don’t provide real-time updates on space availability or convenient payment options. An intelligent and automated solution is needed to optimize parking operations, save time, and reduce environmental impacts.

# **Propose Solution**

To address the problem, we will create a smart Parking Management System that provides real-time updates on parking space availability. The system will allow users to reserve spots, make online payments, and navigate to available spaces quickly. It will use a user-friendly app or website to ensure smooth interaction. This approach will save time, reduce congestion, and improve parking efficiency.

# **Stakeholders**

The primary Stakeholders will be Vehicle Owners, Managers and Developers. The secondary stakeholders will be Municipal Authorities, Payment security providers and Environmental Advocacy Groups.

# **Project Scope**

The system will provide features like real-time parking availability updates, online booking, navigation to parking spaces, and secure payment options. It will not include functionalities like vehicle maintenance, parking lot construction, or traffic law enforcement. Its focus is strictly on managing parking operations efficiently and improving user convenience.

# **Tools & Technology**

For this project, we will be using either of Java or PHP while using the editor Visual Studio Code and Window Builder. By using these tools & technology, we will gain a lot of experience in these languages that can further help us in our future work and projects.

# **References**

We got this project reference from the following websites:

<https://parkable.com/parking-management-system>

<https://wayleadr.com/use-cases/parking-management-system/>

<https://www.fresh222.com/car-parking-management-system/>