

Magnetic Door Holder and Stop

Problem Statement:

Doors that swing shut unexpectedly can be a significant inconvenience and pose safety risks. Traditional door stoppers often come with their own set of problems, such as being bulky, easily misplaced, or causing damage to floors and walls.

Proposed Solution:

The Magnet Hold is a magnetic door holder and stopper designed to effectively address the common issues associated with traditional door stoppers. By using strong magnets, this solution provides a secure grip on doors, preventing unexpected movements and minimizing the risk of damage to surrounding surfaces.

Benefits

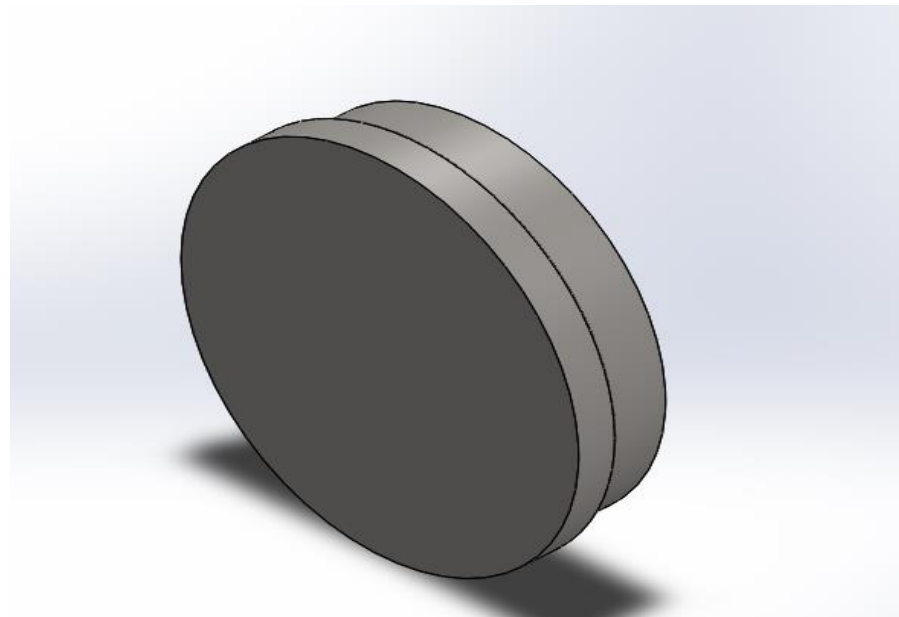
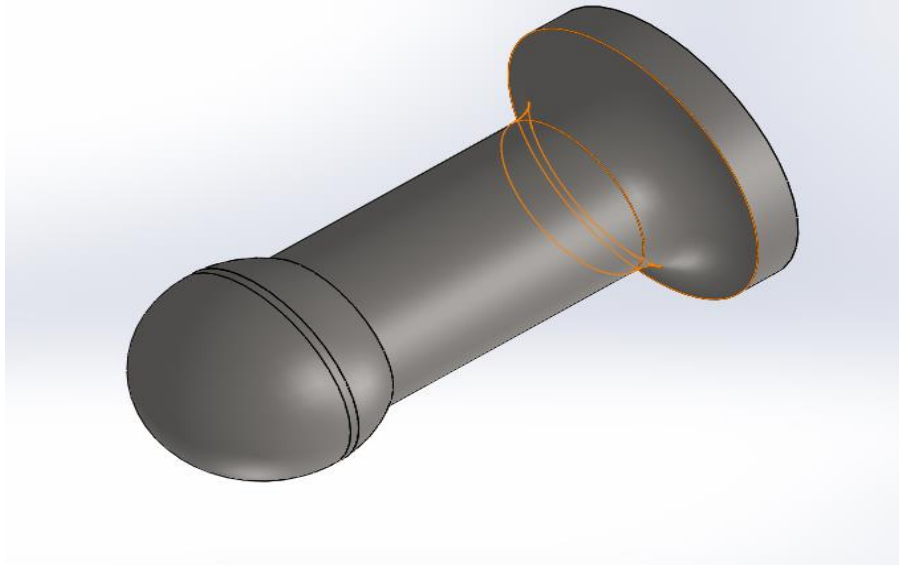
1. **Safety:**
 - Prevents unexpected door slams, reducing the risk of injury, especially for children and pets.
2. **Protection:**
 - Safeguards walls and furniture from damage caused by swinging doors.
3. **Convenience:**
 - Effortlessly keeps doors open, eliminating the need for bulky stoppers.
 - Enhances the aesthetic of any space with its user-friendly design.

Design Approach

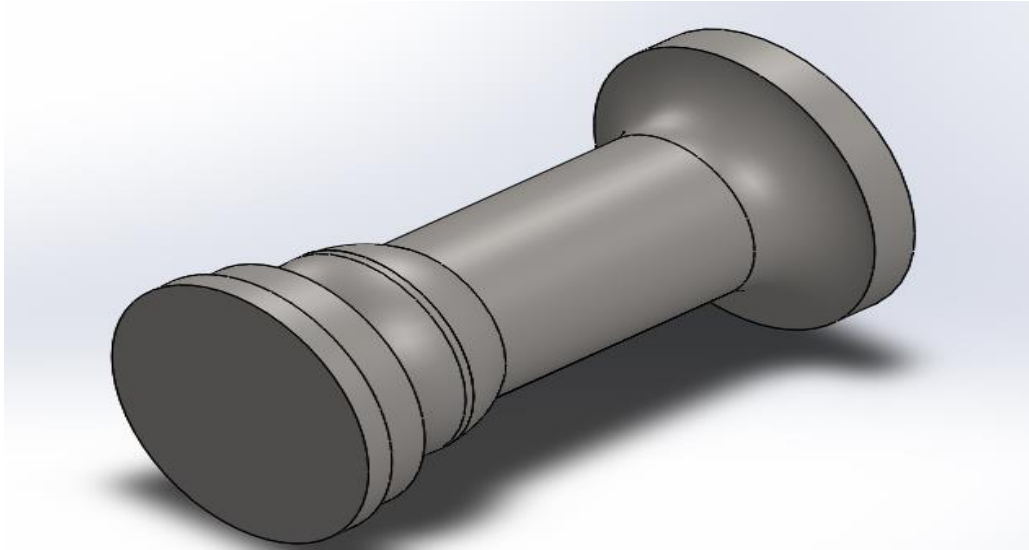
1. **Research and Analysis:**
 - Identified issues through web surfing.
 - Reviewed shortcomings of traditional stoppers.
2. **Design Criteria:**
 - Strong magnetic hold.
 - Easy to install and use.
 - Durable and aesthetically pleasing.

Simulation

1. Parts



2. Assembly



3. 3D



Conclusion

The Magnet Hold offers a practical and innovative solution to a common household problem. By focusing on safety, protection, and convenience, it provides a valuable tool for managing doors effectively. The thoughtful design and rigorous testing ensure that it meets the needs of users while complementing their interior spaces. This project aims to enhance daily living by eliminating the frustrations associated with traditional door stoppers.

Ayesha Javed(bsce23029)

Mukarma Ishaq(bsce23037)

