



ISSN No. : 2321-9653

iJRASET

International Journal for Research in Applied
Science & Engineering Technology

iJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET56845, entitled
Smart-Spend: Excess Shopping Provoker Trolley with an Alert System

by
Omkar K. Rasal

after review is found suitable and has been published in
Volume 11, Issue XI, November 2023
in

International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors

By [Signature]

Editor in Chief, iJRASET

JISRA
F

ISRA Journal Impact
Factor: 7.429

45.98
INDEX COPERNICUS

THOMSON REUTERS
Researcher ID: N-9681-2016

doi 10.22214/IJRASET
cross ref

Scopus
TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

iJRASET

International Journal for Research in Applied
Science & Engineering Technology

iJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

*It is here by certified that the paper ID : IJRASET56845, entitled
Smart-Spend: Excess Shopping Provoker Trolley with an Alert System
by
Vanshika A. Ranavare*

*after review is found suitable and has been published in
Volume 11, Issue XI, November 2023
in
International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors*

By [Signature]

Editor in Chief, iJRASET

JISRA
F

ISRA Journal Impact
Factor: 7.429

45.98
INDEX COPERNICUS

THOMSON REUTERS
Researcher ID: N-9681-2016

doi 10.22214/iJRASET
cross ref

Scopus
TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

iJRASET

International Journal for Research in Applied
Science & Engineering Technology

iJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET56845, entitled
Smart-Spend: Excess Shopping Provoker Trolley with an Alert System

by

Vedant N. Rane

after review is found suitable and has been published in
Volume 11, Issue XI, November 2023
in

International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors

By [Signature]

Editor in Chief, iJRASET

JISRA
F

ISRA Journal Impact
Factor: 7.429

45.98
INDEX COPERNICUS

THOMSON REUTERS
Researcher ID: N-9681-2016

doi 10.22214/IJRASET
cross ref

Scopus
TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

iJRASET

International Journal for Research in Applied
Science & Engineering Technology

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET56845, entitled
Smart-Spend: Excess Shopping Provoker Trolley with an Alert System

by

Soham V. Raskar

after review is found suitable and has been published in
Volume 11, Issue XI, November 2023
in

International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors

By [Signature]

Editor in Chief, iJRASET

ISRA
JOURNAL
IMPACT
FACTOR

ISRA Journal Impact
Factor: 7.429

45.98
INDEX COPERNICUS

THOMSON REUTERS
Researcher ID: N-9681-2016

doi 10.22214/IJRASET
cross ref

SCOPUS
TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

iJRASET

International Journal for Research in Applied
Science & Engineering Technology

iJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET56845, entitled
Smart-Spend: Excess Shopping Provoker Trolley with an Alert System

by
Kunal S. Rane

after review is found suitable and has been published in
Volume 11, Issue XI, November 2023
in

International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors

By [Signature]

Editor in Chief, iJRASET

 ISRA

ISRA Journal Impact
Factor: 7.429



45.98

INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9681-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

iJRASET

International Journal for Research in Applied
Science & Engineering Technology

iJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

*It is here by certified that the paper ID : IJRASET56845, entitled
Smart-Spend: Excess Shopping Provoker Trolley with an Alert System
by
Meghraj P. Ranaware*

*after review is found suitable and has been published in
Volume 11, Issue XI, November 2023
in
International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors*

By [Signature]

Editor in Chief, iJRASET

JISRA
F

ISRA Journal Impact
Factor: 7.429

45.98
INDEX COPERNICUS

THOMSON REUTERS
Researcher ID: N-9681-2016

doi 10.22214/IJRASET
cross ref

Scopus
TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

iJRASET

International Journal for Research in Applied
Science & Engineering Technology

iJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET56845, entitled
Smart-Spend: Excess Shopping Provoker Trolley with an Alert System

by

Smita S. Mande

after review is found suitable and has been published in
Volume 11, Issue XI, November 2023
in

International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors

By [Signature]

Editor in Chief, iJRASET

JISRA
F

ISRA Journal Impact
Factor: 7.429

45.98
INDEX COPERNICUS

THOMSON REUTERS
Researcher ID: N-9681-2016

doi 10.22214/iJRASET
cross ref

Scopus
TOGETHER WE REACH THE GOAL
SJIF 7.429