Smart College

Hostel Mess Management System to Reduce Wastage of Food

Presented by:
Alisha Joshi
Khushboo
Laxmi Garde
Pratima Lunkad

What makes a Smart City SMART?

- The term differs across geographies based on the level of developments, change according to reforms.

- Using data and intelligence tools to generate knowledge, information to better manage services delivered to people.

Smart College : Hostel Mess

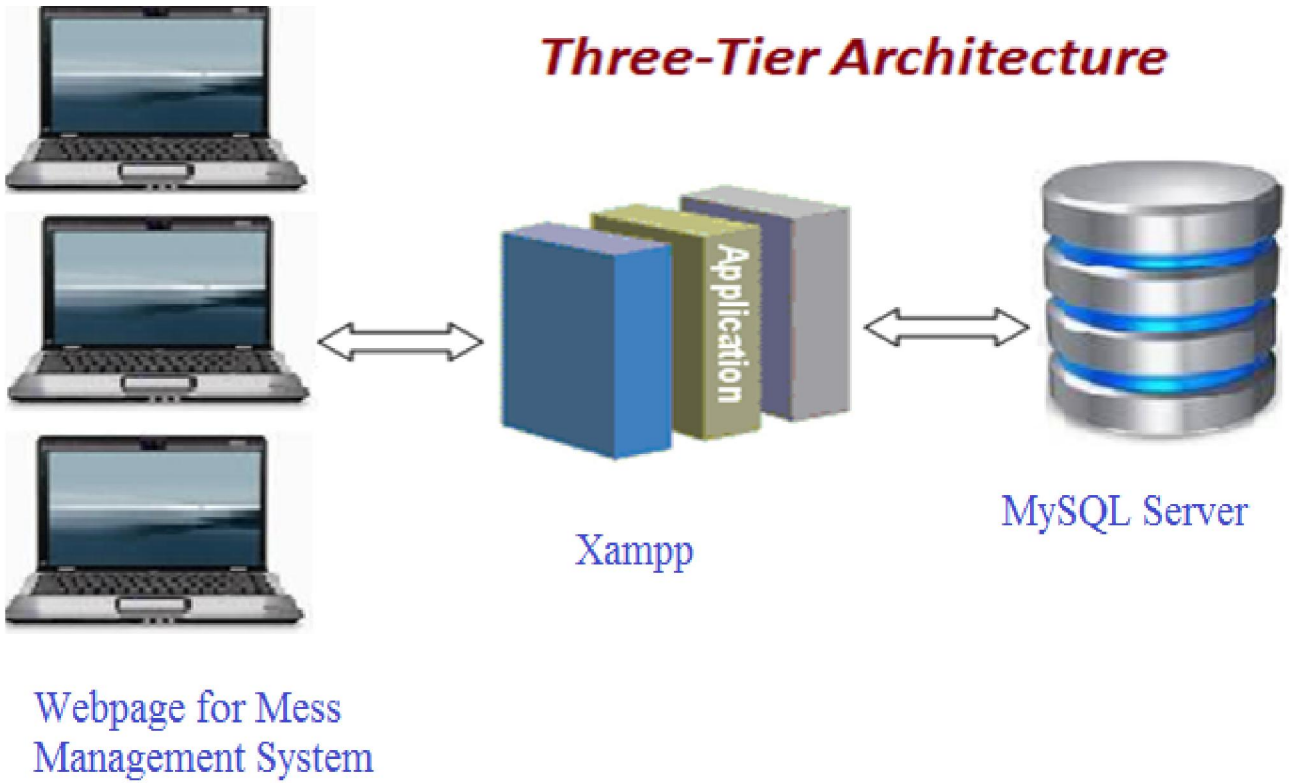
Proposed solution:

- Each student registers for meals, day before through a student portal.
- Registration by Hid, check boxing lunch/dinner.
- Food is prepared proportional to count received before deadline.
- Mess authority confirms registration in mess at the time of meal by Hid.
- Hence only what is needed is cooked by mess authorities.

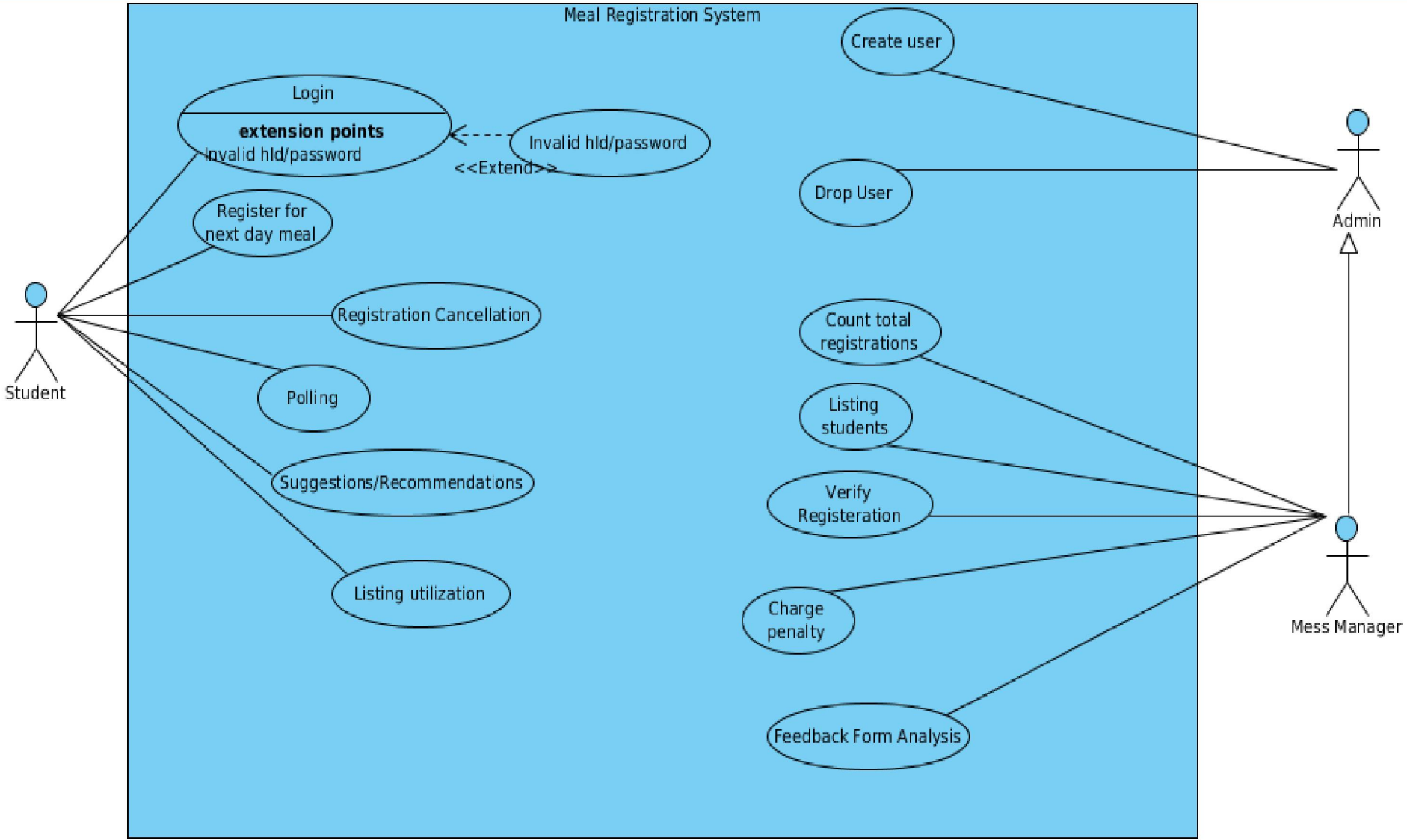
What makes this idea smart?

- Stakeholders are invited to participate virtually in decision making.
- Cook only what is needed to avoid wastage.
- Utilization details for every student to check his/her monthly expenditure.
- Provision to donating the residual food to needy/NGO's.
- The scalability of the system which would lead to a larger impact.

Architectural Design



Use case diagram of system



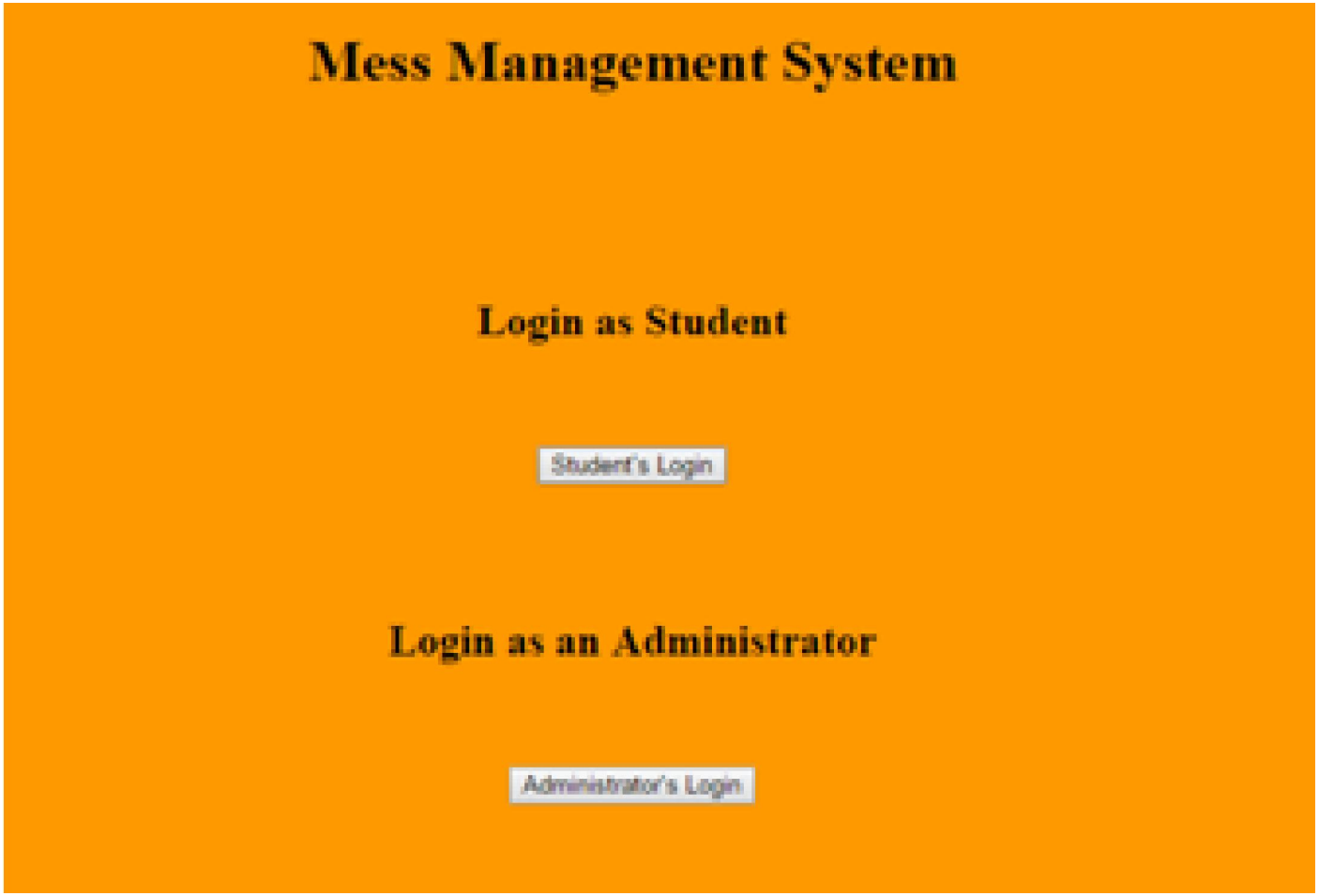
Tools Used

- Visual Paradigm 13
- Xampp
- phpMyAdmin
- MySQL
- HTML 5.0
- CSS 3
- Java Applets
- Eclipse Juno
- Notepad++ 6.3.2

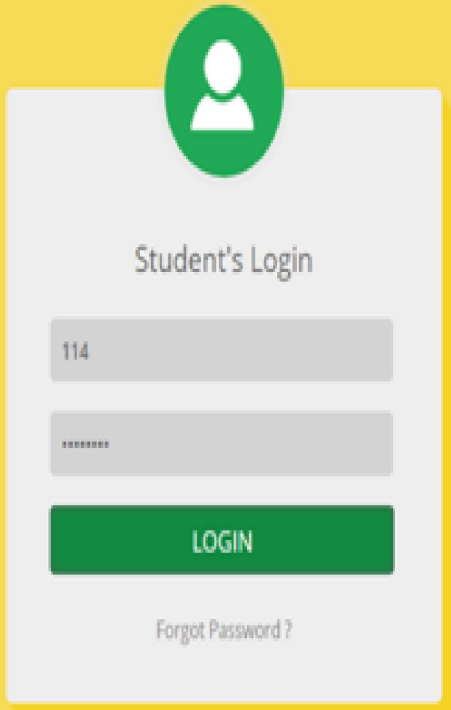
Implementation details

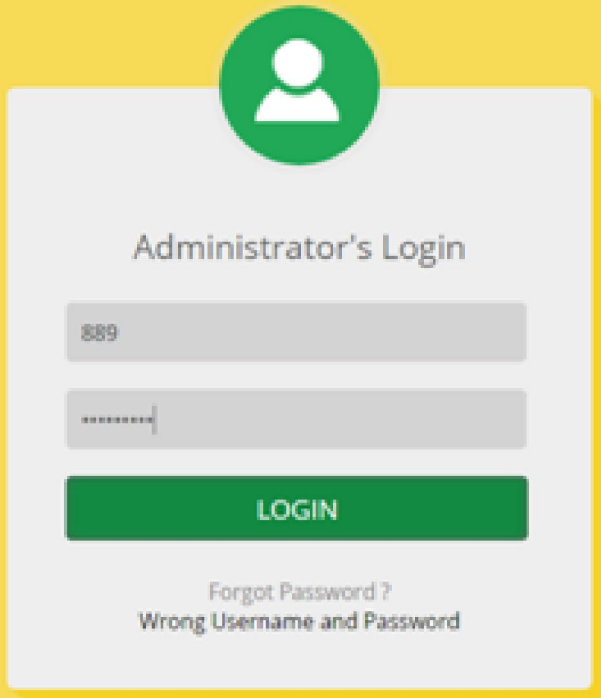
- Design the database
- Design a prototype of the User Interface for each web page.
- Create the UI on notepad++ in php documents
- Design the database queries and test it on sample data.
- Add database queries and functionalities to the same

Implementation Screenshot- 1



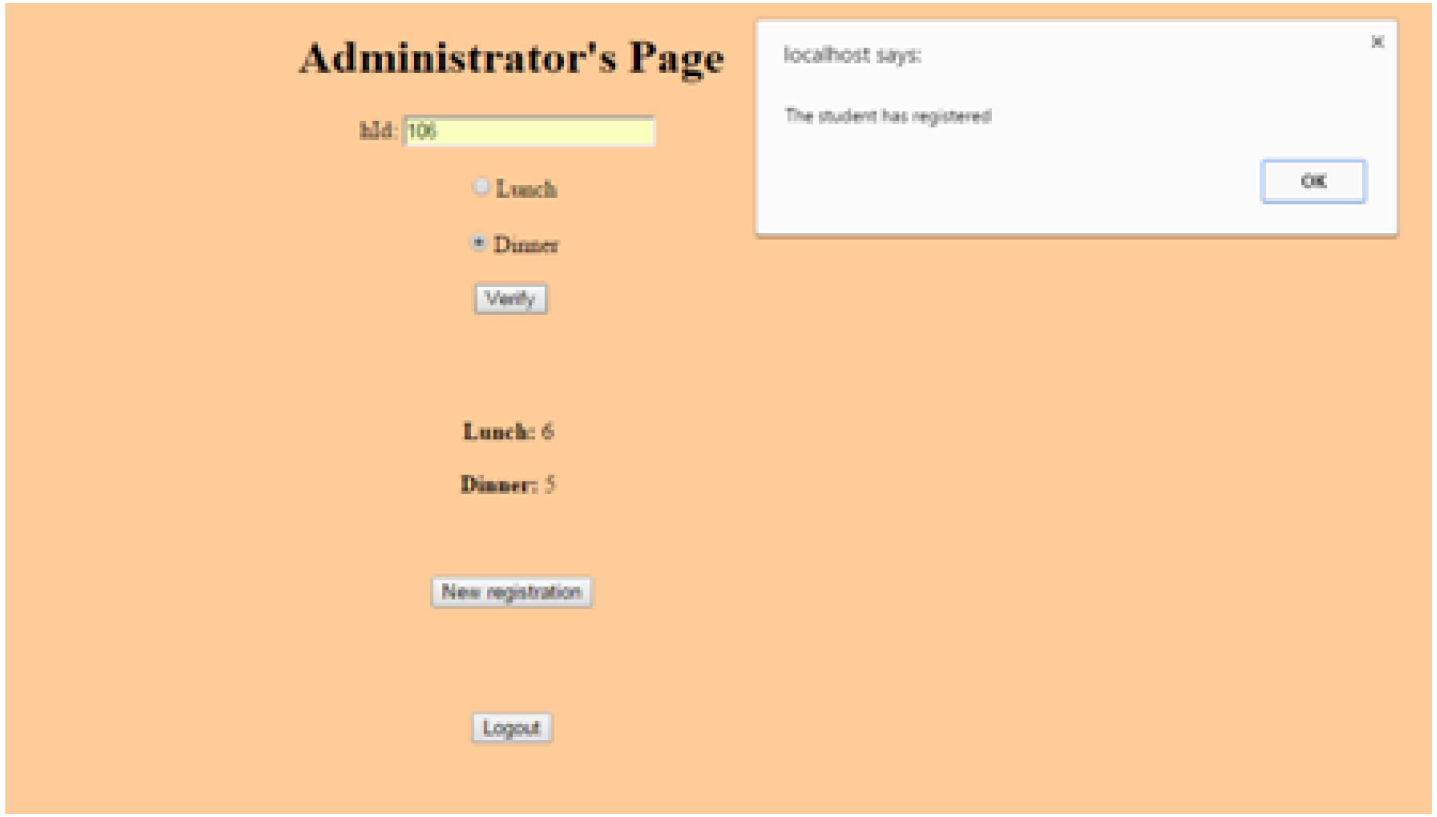
Implementation Screenshot-2





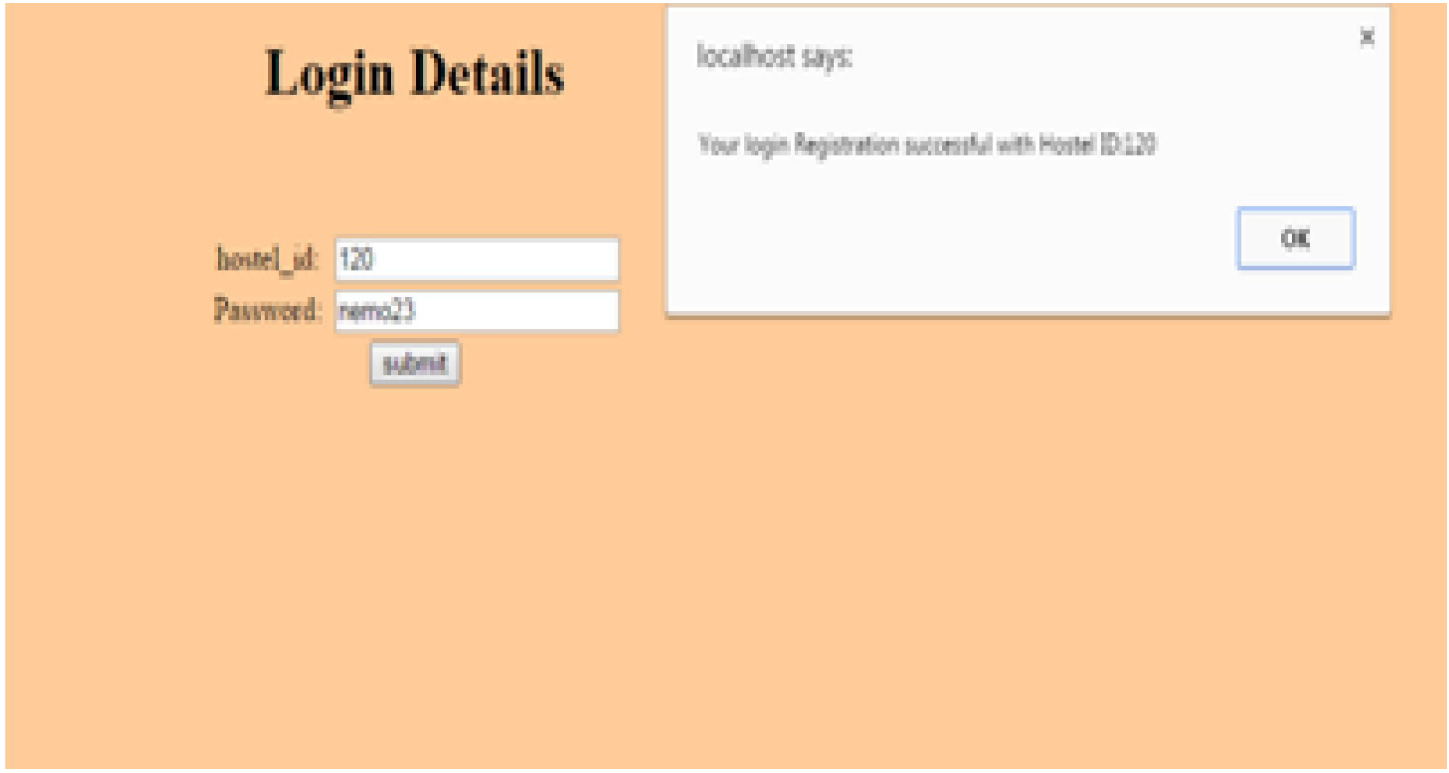
Implementation Screenshot-3

Implementation Screenshot-4



Implementation Screenshot-5

Implementation Screenshot-6



Case study- Baya Karve Hostel Complex

- On one-time basis in Hostel no-3 where 300 girls are assumed to have a meal (food cooked for 300).
- On an average one-time only 150-170 girls have their meal and rest food is wasted.
- Purchased Rice = 15Kg
- Purchased Flour=12Kg
- Purchased Vegetables=30Kg(3 Kg wasted for making it ready to cook)
- On an average for one-time:

  Wasted cooked but unused food=5Kg

  Residual food collected from thalis =5/6 Kgs

  Therefore in a day twice the amount of food is wasted in accordance to above statistics.

Future Scope

- In large hostel complexes , provision to send food to a biogas treatment plant or NGO depending on amount and usage .
- The system can be extended to integrate with a paypal account for payment of each registered meal.
- Polling for deciding menu and feedback with analysis can be added to increase student participation.
- Integrating meal registrations with SMS/ whatsapp text parsing.
- The hId can be integrated with I-card barcode system for identification and verification.

Conclusion

- Based on the case study, we estimated that the system can reduce the food wastage to a considerable extent.

- This system when scaled to multiple places will thereby increase the overall impact, thus supporting the Smart City concept.

References

PHP Tutorials

- www.homeandlearn.co.uk
- www.stackoverflow.com
- www.youtube.com
- www.tutorialspoint.com
- www.w3schools.com
- www.smartcity.gov.in

THANK YOU!!