

**ONLINE HOMESTAY RESERVATION SYSTEM  
(OHR)**

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# **ONLINE HOMESTAY RESERVATION SYSTEM**

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## ABSTRACT

Aims of this project are to study the needs of *Homestay* and to develop a prototype model for *Homestay* reservation process. This prototype will help the reservation process for the customer and also for the coordinator of the *Homestay*. By developing this project, it will help the coordinator to accelerate their business information properly either directly or indirectly. The development of this project also brings a big impact to the *Homestay* industries, where they can start promote their *Homestay* in an interactive ways. In addition the Object-Oriented System Analysis and Design are use as a methodology to develop the prototype. It is important to follow the step of the methodology to ensure the process of developing the prototype went smooth and the objectives of this project are achieved.

**Keyword:** Homestay, Reservation, Prototype Model

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# CHAPTER 1

## INTRODUCTION

This chapter are use to provide the description on the Online Homestay Reservation System. It contains the background of the *Homestay* in Malaysia and also the reservation process involved in the *Homestay* programme. This chapter is also important to define the problem statement of the *Homestay* program, the objectives also the scope of this project.

### 1.1 BACKGROUND STUDY

The term *Homestay* brings different meaning in different countries. As for Australia, the term "*Homestay*" is referring to a farmhouse accommodation while in United Kingdom it is associated with learning English language. As stated in the *Merriam Webster Dictionary (2007)* "*Homestay*" is defined as "a period during which a visitor in a foreign country lives with a local family". So the term *homestay* can be concluded as a "*situation where people will live with other people to learn and to understand their culture and way of life*".

"*Homestay*" is one of the products that have been introduced by the Ministry of Tourism for the tourism industries in Malaysia. It is a combination of tourism and recreation programme which has potential to support the development of the rural areas in Malaysia, other than that it also contributes to a very sustainable environment of Malaysia tourism industry. The most important component which differentiates Malaysia "*Homestay*" program with other countries is the element of staying with adopted family or normally is the host family or the owner of the house

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## REFERENCES

Abowd, G., Atkenson, C., Hong, J., Long, S., Kooper, R., & Pinkerton, M. (1997). Cyberguide: A mobile context aware tour guide. *Wireless Networks*, 3 (5), 421-433.

Advantages manual filling system Retrieved from [http://wiki.answers.com/Q/Advantages\\_to\\_a\\_manual\\_filling\\_system](http://wiki.answers.com/Q/Advantages_to_a_manual_filling_system)

Ahn, T., Ryu, S. & Han, I. (2004). The Impact of the Online and Offline Features on the User Acceptance of Internet Shopping Mall. *Electronic Commerce Research*, 405- 420.

Amani, A.M., Zaharin, M., Norshuhada, S. (2006). Requirement Model for PEKA Management System: A Case Study in Kubang Pasu Secondary Schools. Design Research in software Development. Penerbit Universiti Utara Malaysia

Amran, H. (1997). Policy and planning of the Tourism Industry in Malaysia [On-Line] Available [http://adrf.trf.or.th/ADRF6update/Full\\_Papers/Tourism\\_Product\\_Development/Amran\\_Hamzah/Amran\\_paper.pdf](http://adrf.trf.or.th/ADRF6update/Full_Papers/Tourism_Product_Development/Amran_Hamzah/Amran_paper.pdf)

Amran, H. (1997). Malaysian Homestay from the Perspective of Young Japanese Tourist: The Quest for Furosoto

Ann, M & Peter, W. (1999). Attracting Japanese Tourists into The Rural Hinterland: Implications for Rural development and Planning Advantages of Manual System Retrieved from [http://wiki.answers.com/Q/Advantages\\_of\\_manual\\_based\\_information\\_systems](http://wiki.answers.com/Q/Advantages_of_manual_based_information_systems)

Barker, D. (2000). Requirements Modeling technology: A vision for better, faster, and cheaper system.

Bed and breakfast Tourism ([www.tq.com.au/research](http://www.tq.com.au/research))

Booking (<http://en.wikipedia.org/wiki/Booking>)

Boraq, A.(2009) Customizing Hotel Services by Mobile Application [On-Line] Available <http://ep3.uum.edu.my>

Carat, G(2002) "E-Payment System Database- Trends and Analysis.Electronic Payment System Observatory (EPSO)".Institute for perspective Technological/European Commision.

Fathi (2009) "Evaluation of Car Rental Reservation/Management System with Tracking Capability Performance" [On-Line] Available <http://ep3.uum.edu.my>

Fogg, B. (1999). Persuasive technologies. *Communications of the ACM* 42(5), 27-29

Galster, M., & Bucherer, E. (2008). A Taxonomy for identifying and specifying Non- Functional Requirements in Service-Oriented development. Paper presented at the Services-Part I, 2008. IEEE Congress on.

Hai, L. (2009). The Role of Collaboration Diagrams in OO Software Engineering Student Projects. Paper presented at the Software Engineering Education and Training, 2009. CSEET '09 22<sup>nd</sup> Conference.

Hanan, M. G. (2008) .Online Homestay Reservation Application for Langkawi Homestay [On-Line] Available <http://ep3.uum.edu.my>

Hoffer, J. A., George, J. F., & Valacich, J. S. (2004). *Modern System analysis and Design* (2<sup>nd</sup> edition), United Kingdom: Addison Wesley Longman.

Homestay Activities Retrived from Malaysia Tourism Industries Website  
[http://www.tourism.gov.my/en/activities/default.asp?activity\\_id=11](http://www.tourism.gov.my/en/activities/default.asp?activity_id=11)

Ibrahim, N., David, P., & Asman. N., (2010) Current Planning Priorities in Rural Village in Malaysia [On-Line] Available <http://www.isda2010.net>

Jeffrey,A.H, Joey,F.G & Joseph, S.V (2005). *Modern System Analysis And Design*”Pearson Prentice Hall

Juraimi, M.I. (2005) Sustainable Competitive Advantages, Case Study: Tanjung Piai Homestay Program.

Kalsom, K. (2009). Community Based Tourism In Developing countries. Proceeding of International Seminar on Community Based Tourism

Ketut, A. (1999). *Economic Aspects of Tourism Development: The Case of Malaysia Peninsular*

Kothari, C. (2005). *Research Methodology:Methods & Techniques: New Age International*

Lankton, N. (2007). Antecedents and Dimensions of Online Service Expectations. 54(4): 776-788.

Lanier, P. and Berman, J. (1993) Bed-and-Breakfast Inns Come of Ages. *Cornell Hotel and Restaurant Administration Quarterly* 34(2), 15-23.

Larry, U. (2005). *PHP and MYSQL for Dynamic Website*. Peachpit Press

Lynn C.H., Chandana, J. & Anthony C. (2008). Sustainable Tourism Development in The Caribbean: Practical Challenges.

Malaysia (2001) Rural Tourism Master Plan. Ministry of Culture, Arts and Tourism: Kuala Lumpur

Malaysia (2006) Ninth Malaysia Plan, Government of Malaysia Printers: Kuala Lumpur.

Malaysia (1996) Seventh Malaysia Plan 1996-2000. Economic Planning Unit, Prime Minister's Department, Malaysia.

Ministry of Tourism (2009). Homestay Statistic 2009.

Mohammad, M.H. (2009). Design Web Based Ticketing For Menara Alor Setar [On-Line] Available <http://ep3.uum.edu.my>

Muhamad Faizal Che Leh (2008). The Study of User Perspective in Webpage Design for Homestay in Malaysia [On-Line] Available [http://psasir.upm.edu.my/7086/1/USM\\_2008\\_1a.pdf](http://psasir.upm.edu.my/7086/1/USM_2008_1a.pdf)

Nijaz. (2000). Dynamic web-Based Application Development. New York, Prentice Hall

Nojeera, M. (2009) Design Web Based Ticketing System for Hotel In Malaysia" [On-Line] Available <http://ep3.uum.edu.my>

Norshuhada, S. & Shahizan, H. (2010). Design Research in software Development. Penerbit Universiti Utara Malaysia

Nunamaker, J.f., & Chen, M. (1990). Systems Development in Information systems and Research (IEEE).

Razwan, M.S. (2009). Study Room Online Reservation in UUM library [On-Line] Available

Reservation Retrieved from [http://www.meriam\\_webster.com/dictionary/reservation](http://www.meriam_webster.com/dictionary/reservation)

Reservation Retrieved from <http://www.macmillandictionary.com/dictionary/british/reservation>

Rivers, William P. (1998). Is being there enough? The Effects of Homestay Placements on Language Gain During study abroad. Foreign Language Annals 31 (4): 492-500

Saleh, S.A. (2009). Online Programming Course Registration System. [On-Line] Available <http://ep3.uum.edu.my>

Schmitt. (2006). Engaging a Rich Web Experience. Greenwich: Manning Publications Co.

Scott, W.A. (2004). The Object Primer 3<sup>rd</sup> Edition: agile Model Driven Development with UML 2.0. Cambridge University Press

Scott, W. A. (2005). The Elements of UML 2.0 Style. Cambridge University Press

Sequence Diagram Retrieved from <http://www.sequencediagrameditor.com/uml/sequence-diagram.htm> on 27/09/10

Simon, B., Steve, M & Ray, F. (2002). Object-Oriented System Analysis And Design: Using UML. Mc Graw Hill

Three Interesting Events On Selangor Tourism 2008 Itinerary. Malaysian National News Agency. 2008-05-16. Retrieved 17/08/2010

Treiber, M. (2007). Active Web Service Registries. 11(5): 66 – 71.

UNDP, E.I. (2004). MESCOT: Batu Puteh Community of Lower Kinabatangan: Equator Initiative, UNDP.

Use Case Diagram Retrieved from [http://en.wikipedia.org/wiki/Use\\_case\\_diagram](http://en.wikipedia.org/wiki/Use_case_diagram) on 27/09/10

Vaishnavi, V., & Kuechler, W. (2004). Design Research in Information systems. January, 20, 2004.

Walid, S.M. (2009). Halls Reservation Application For University Lecturers [On-Line] Available <http://ep3.uum.edu.my>

Yahaya, I., & Abdul R. (2009). Homestay Program and Rural Community Development in Malaysia, pg 9-10

Zyad, A.H(2010). A web based Student Housing assistant Model. [On-Line] Available <http://ep3.uum.edu.my>