

1. The title of your project :
  - a. **The Development and Usefulness of Rapid Epidemiological Notification System in Determining the Notifiable Infectious Diseases in HUSM**

2. your name/address/email

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3. Who do you think could join you [from other schools --eg chemical engineer, computer expert etc] in your research
  - a. School of Computer
  - b. School of Humanities
4. What is the objective
  - a. To develop a rapid almost real time notification system based on the “Notifikasi Penyakit Berjangkit yang Perlu Dilaporkan” or health 1 Rev form from Ministry of Health Malaysia
  - b. To determine the usefulness of the rapid almost real time notification system developed in terms of mean days of notification done and the time of contact tracing done
  - c. To determine the characteristics of notifiable infectious diseases managed and treated in Hospital Universiti Sains Malaysia (HUSM) from January 2009 to December 2009
5. Brief methodology/design
  - a. Type : Cross-sectional study
  - b. Study duration : January 2009 – December 2009
  - c. Software development :
    - i. Source : Open Source
    - ii. Model : based on ‘Notifikasi Penyakit Berjangkit yang Perlu Dilaporkan’ form developed by Ministry of Health Malaysia
    - iii. Data : web-based and client-based
    - iv. Prototype : will be known as “Rapid Epidemiological Notification System” or “RENS”
    - v. Fields : 70-80 fields or variables
  - d. Source of data
    - i. Records of patients from Unit Rekod admitted during study duration
  - e. Inclusion criteria
    - i. All patients diagnosed with notifiable infectious diseases based on on ‘Notifikasi Penyakit Berjangkit yang Perlu Dilaporkan’ form developed by Ministry of Health Malaysia in HUSM

- ii. All patients diagnosed with notifiable infectious diseases based on on ‘Notifikasi Penyakit Berjangkit yang Perlu Dilaporkan’ form developed by Ministry of Health Malaysia refered to HUSM
  - f. Statistics
    - i. Data entry : “Rapid Epidemiological Notification System” or “RENS”
    - ii. Data transfer : data need to be transferred automatically from RENS to statistical software such as SPSS or Stata using text-based format
    - iii. Data analysis:
      - 1. Descriptive
      - 2. Inferential
- 6. The outcome of the projects [ie the usefulness of the products]
  - a. RENS provide a minimum error of notification
  - b. RENS will replace the manual notification system
  - c. RENS will enable epidemiologist and ID physicians to have almost real time data of possible outbreak
  - d. RENS will enhance emergency preparedness in dealing with infectious diseases
  - e. RENS will be cheap but reliable compared to Window-based software
  - f. RENS can be implemented in all KKM hospitals and even in private hospitals