|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | **C:\Users\sonnx0907\Desktop\Untitled.png** | **MINISTRY OF EDUCATION AND RAINING** | | | **FPT UNIVERSITY** | | |
| Capstone Project Document |
| Hospital Finder |
| |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | | **Group 11** | | | **Group Members** | Lê Phước Việt – Team Leader – SE60706  Nguyễn Xuân Sơn – Team Member – SE60727  Vũ Nhật Anh Khoa – Team Member – SE60817  Dương Thị Hoàng Anh – Team Member – 60434 | | **Supervisor** | Nguyễn Đức Khoan | | **Ext Supervisor** | N/A | | **Capstone Project code** | HospitalF | | |
| - Ho Chi Minh City, May / 2014 - |

**Table of Contents**

[**4.1** **Design Overview** 6](#_Toc390081943)

[**4.2** **System Architecture Design** 6](#_Toc390081944)

[**4.3** **Component Diagram** 6](#_Toc390081945)

[**4.4** **Detailed Description of Components** 6](#_Toc390081946)

[**4.4.1** **Class Diagram** 6](#_Toc390081947)

[**4.4.2** **Class Diagram Explanation** 6](#_Toc390081948)

[**4.4.2.1** **User** 6](#_Toc390081949)

[**4.4.2.2** **Hospital** 6](#_Toc390081950)

[**4.4.2.3** **HospitalType** 6](#_Toc390081951)

[**4.4.2.4** **Doctor** 6](#_Toc390081952)

[**4.4.2.5** **Doctor\_Speciality** 6](#_Toc390081953)

[**4.4.2.6** **Doctor\_Hospital** 6](#_Toc390081954)

[**4.4.2.7** **Appointment** 6](#_Toc390081955)

[**4.4.2.8** **Role** 6](#_Toc390081956)

[**4.4.2.9** **Rating** 6](#_Toc390081957)

[**4.4.2.10** **Feedback** 6](#_Toc390081958)

[**4.4.2.11** **FeedbackType** 6](#_Toc390081959)

[**4.4.2.12** **Facility** 6](#_Toc390081960)

[**4.4.2.13** **Hospital\_Facility** 6](#_Toc390081961)

[**4.4.2.14** **Service** 6](#_Toc390081962)

[**4.4.2.15** **Hospital\_Service** 6](#_Toc390081963)

[**4.4.2.16** **Photo** 6](#_Toc390081964)

[**4.4.2.17** **Ward** 6](#_Toc390081965)

[**4.4.2.18** **District** 6](#_Toc390081966)

[**4.4.2.19** **City** 6](#_Toc390081967)

[**4.4.2.20** **Speciality** 6](#_Toc390081968)

[**4.4.2.21** **Hospital\_Speciality** 6](#_Toc390081969)

[**4.4.2.22** **Disease** 6](#_Toc390081970)

[**4.4.2.23** **Speciality\_Disease** 6](#_Toc390081971)

[**4.4.2.24** **WordDictionary** 6](#_Toc390081972)

[**4.4.2.25** **Word\_Hospital** 7](#_Toc390081973)

[**4.4.2.26** **SentenceDictionary** 7](#_Toc390081974)

[**4.4.2.27** **Sentence\_Word** 7](#_Toc390081975)

[**4.5** **Sequence Diagram** 7](#_Toc390081976)

[**4.5.1** **Login** 7](#_Toc390081977)

[**4.5.2** **Logout** 7](#_Toc390081978)

[**4.5.3** **Change Password** 7](#_Toc390081979)

[**4.5.4** **Reclaim Forgotten Password** 7](#_Toc390081980)

[**4.5.5** **Search Hospital <GU> <US>** 7](#_Toc390081981)

[**4.5.6** **Import Hospital Using Excel** 7](#_Toc390081982)

[**4.5.7** **Create Hospital** 7](#_Toc390081983)

[**4.5.8** **Create Hospital User’s Account** 7](#_Toc390081984)

[**4.5.9** **View Hospital Information** 7](#_Toc390081985)

[**4.5.10** **Search Doctor <GU> <US>** 7](#_Toc390081986)

[**4.5.11** **Create Appointment Online** 7](#_Toc390081987)

[**4.5.12** **Cancel Appointment** 7](#_Toc390081988)

[**4.5.13** **Feedback** 7](#_Toc390081989)

[**4.5.14** **Comment** 7](#_Toc390081990)

[**4.5.15** **Reply Comment** 7](#_Toc390081991)

[**4.5.16** **Rating Hosptial** 7](#_Toc390081992)

[**4.5.17** **Add New Doctor** 7](#_Toc390081993)

[**4.5.18** **Search List of Doctor <HU>** 7](#_Toc390081994)

[**4.5.19** **Search List of Hospital <AD>** 7](#_Toc390081995)

[**4.5.20** **Update Doctor Information** 7](#_Toc390081996)

[**4.5.21** **Upload Photo** 7](#_Toc390081997)

[**4.5.22** **Update Hospital Information** 7](#_Toc390081998)

[**4.5.23** **View List of Appointments** 7](#_Toc390081999)

[**4.5.24** **View List of Feedbacks** 7](#_Toc390082000)

[**4.5.25** **View List of Users** 7](#_Toc390082001)

[**4.5.26** **Activate Users** 7](#_Toc390082002)

[**4.5.27** **Deactivate Users** 7](#_Toc390082003)

[**4.5.28** **View Hospital Statistics** 8](#_Toc390082004)

[**4.5.29** **View System Statistics** 8](#_Toc390082005)

[**4.6** **User Interface Design** 8](#_Toc390082006)

[**4.6.1** **Login** 8](#_Toc390082007)

[**4.6.2** **Logout** 8](#_Toc390082008)

[**4.6.3** **Change Password** 8](#_Toc390082009)

[**4.6.4** **Reclaim Forgotten Password** 8](#_Toc390082010)

[**4.6.5** **Search Hospital <GU> <US>** 8](#_Toc390082011)

[**4.6.6** **Import Hospital Using Excel** 8](#_Toc390082012)

[**4.6.7** **Create Hospital** 8](#_Toc390082013)

[**4.6.8** **Create Hospital User’s Account** 8](#_Toc390082014)

[**4.6.9** **View Hospital Information** 8](#_Toc390082015)

[**4.6.10** **Search Doctor <GU> <US>** 8](#_Toc390082016)

[**4.6.11** **Create Appointment Online** 8](#_Toc390082017)

[**4.6.12** **Cancel Appointment** 8](#_Toc390082018)

[**4.6.13** **Feedback** 8](#_Toc390082019)

[**4.6.14** **Comment** 8](#_Toc390082020)

[**4.6.15** **Reply Comment** 8](#_Toc390082021)

[**4.6.16** **Rating Hosptial** 8](#_Toc390082022)

[**4.6.17** **Add New Doctor** 8](#_Toc390082023)

[**4.6.18** **Search List of Doctor <HU>** 8](#_Toc390082024)

[**4.6.19** **Search List of Hospital <AD>** 8](#_Toc390082025)

[**4.6.20** **Update Doctor Information** 8](#_Toc390082026)

[**4.6.21** **Upload Photo** 8](#_Toc390082027)

[**4.6.22** **Update Hospital Information** 8](#_Toc390082028)

[**4.6.23** **View List of Appointments** 8](#_Toc390082029)

[**4.6.24** **View List of Feedbacks** 8](#_Toc390082030)

[**4.6.25** **View List of Users** 8](#_Toc390082031)

[**4.6.26** **Activate Users** 8](#_Toc390082032)

[**4.6.27** **Deactivate Users** 8](#_Toc390082033)

[**4.6.28** **View Hospital Statistics** 8](#_Toc390082034)

[**4.6.29** **View System Statistics** 9](#_Toc390082035)

[**4.7** **Database Design** 9](#_Toc390082036)

[**4.7.1** **User** 9](#_Toc390082037)

[**4.7.2** **Hospital** 9](#_Toc390082038)

[**4.7.3** **HospitalType** 9](#_Toc390082039)

[**4.7.4** **Doctor** 9](#_Toc390082040)

[**4.7.5** **Doctor\_Speciality** 9](#_Toc390082041)

[**4.7.6** **Doctor\_Hospital** 9](#_Toc390082042)

[**4.7.7** **Appointment** 9](#_Toc390082043)

[**4.7.8** **Role** 9](#_Toc390082044)

[**4.7.9** **Rating** 9](#_Toc390082045)

[**4.7.10** **Feedback** 9](#_Toc390082046)

[**4.7.11** **FeedbackType** 9](#_Toc390082047)

[**4.7.12** **Facility** 9](#_Toc390082048)

[**4.7.13** **Hospital\_Facility** 9](#_Toc390082049)

[**4.7.14** **Service** 9](#_Toc390082050)

[**4.7.15** **Hospital\_Service** 9](#_Toc390082051)

[**4.7.16** **Photo** 9](#_Toc390082052)

[**4.7.17** **Ward** 9](#_Toc390082053)

[**4.7.18** **District** 9](#_Toc390082054)

[**4.7.19** **City** 9](#_Toc390082055)

[**4.7.20** **Speciality** 9](#_Toc390082056)

[**4.7.21** **Hospital\_Speciality** 9](#_Toc390082057)

[**4.7.22** **Disease** 9](#_Toc390082058)

[**4.7.23** **Speciality\_Disease** 9](#_Toc390082059)

[**4.7.24** **WordDictionary** 9](#_Toc390082060)

[**4.7.25** **Word\_Hospital** 9](#_Toc390082061)

[**4.7.26** **SentenceDictionary** 9](#_Toc390082062)

[**4.7.27** **Sentence\_Word** 9](#_Toc390082063)

[**4.8** **Algoritms** 9](#_Toc390082064)

[**4.8.1** **Geographic Information Retrieval** 9](#_Toc390082065)

[**4.8.2** **Boyer Moore Matching Algorithm** 10](#_Toc390082066)

**Report No.4: System Design Description (SDD)**

1. **Design Overview**
2. **System Architecture Design**
3. **Component Diagram**
4. **Detailed Description of Components**
5. **Class Diagram**
6. **Class Diagram Explanation**
7. **User**
8. **Hospital**
9. **HospitalType**
10. **Doctor**
11. **DoctorSpeciality**
12. **DoctorHospital**
13. **Appointment**
14. **Role**
15. **Rating**
16. **Feedback**
17. **FeedbackType**
18. **Facility**
19. **HospitalFacility**
20. **Service**
21. **HospitalService**
22. **Photo**
23. **Ward**
24. **District**
25. **City**
26. **Speciality**
27. **HospitalSpeciality**
28. **Disease**
29. **SpecialityDisease**
30. **WordDictionary**
31. **WordHospital**
32. **SentenceDictionary**
33. **SentenceWord**
34. **Sequence Diagram**
    1. **Login**
    2. **Logout**
    3. **Change Password**
    4. **Reclaim Forgotten Password**
    5. **Search Hospital <GU> <US>**
    6. **Import Hospital Using Excel**
    7. **Create Hospital**
    8. **Create Hospital User’s Account**
    9. **View Hospital Information**
    10. **Search Doctor <GU> <US>**
    11. **Create Appointment Online**
    12. **Cancel Appointment**
    13. **Feedback**
    14. **Comment**
    15. **Reply Comment**
    16. **Rating Hosptial**
    17. **Add New Doctor**
    18. **Search List of Doctor <HU>**
    19. **Search List of Hospital <AD>**
    20. **Update Doctor Information**
    21. **Upload Photo**
    22. **Update Hospital Information**
    23. **View List of Appointments**
    24. **View List of Feedbacks**
    25. **View List of Users**
    26. **Activate Users**
    27. **Deactivate Users**
    28. **View Hospital Statistics**
    29. **View System Statistics**
35. **User Interface Design**
    1. **Login**
    2. **Logout**
    3. **Change Password**
    4. **Reclaim Forgotten Password**
    5. **Search Hospital <GU> <US>**
    6. **Import Hospital Using Excel**
    7. **Create Hospital**
    8. **Create Hospital User’s Account**
    9. **View Hospital Information**
    10. **Search Doctor <GU> <US>**
    11. **Create Appointment Online**
    12. **Cancel Appointment**
    13. **Feedback**
    14. **Comment**
    15. **Reply Comment**
    16. **Rating Hosptial**
    17. **Add New Doctor**
    18. **Search List of Doctor <HU>**
    19. **Search List of Hospital <AD>**
    20. **Update Doctor Information**
    21. **Upload Photo**
    22. **Update Hospital Information**
    23. **View List of Appointments**
    24. **View List of Feedbacks**
    25. **View List of Users**
    26. **Activate Users**
    27. **Deactivate Users**
    28. **View Hospital Statistics**
    29. **View System Statistics**
36. **Database Design**
    1. **User**
    2. **Hospital**
    3. **HospitalType**
    4. **Doctor**
    5. **Doctor\_Speciality**
    6. **Doctor\_Hospital**
    7. **Appointment**
    8. **Role**
    9. **Rating**
    10. **Feedback**
    11. **FeedbackType**
    12. **Facility**
    13. **Hospital\_Facility**
    14. **Service**
    15. **Hospital\_Service**
    16. **Photo**
    17. **Ward**
    18. **District**
    19. **City**
    20. **Speciality**
    21. **Hospital\_Speciality**
    22. **Disease**
    23. **Speciality\_Disease**
    24. **WordDictionary**
    25. **Word\_Hospital**
    26. **SentenceDictionary**
    27. **Sentence\_Word**
37. **Algoritms**
38. **Geographic Information Retrieval**
39. **Boyer Moore Matching Algorithm**