| Date | 10/21 | 10/28 | 11/04 | 11/11 | 11/18 | 11/25 | 12/2 | 12/9 | 12/12 |
|---|---|---|---|---|---|---|---|---|---|
| Tasks\Week Index | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **1. Preparation** | ██ | ██ | | | | | | | |
| 1.1 Fundamental project analysis and information searching | ░░ | | | | | | | | |
| 1.2 Set project plan, draw use case diagram and class diagram | ░░ | | | | | | | | |
| 1.3 Establish project website | ░░ | ░░ | | | | | | | |
| **2. Requirement specification and risk analysis** | | ██ | ██ | | | | | | |
| 2.1 Feasibility study and publish feasibility report | | ░░ | ░░ | | | | | | |
| 2.2 Requirements elicitation and analysis, develop system models | | ░░ | ░░ | | | | | | |
| 2.3 Requirement definition, publish user and system requirements | | ░░ | ░░ | | | | | | |
| 2.4 Requirement validation, publish requirements document | | ░░ | ░░ | | | | | | |
| 2.5 Risk analysis | | ░░ | ░░ | | | | | | |
| 2.6 Publish customer test plan | | ░░ | ░░ | | | | | | |
| **3. System and software design** | | | ██ | ██ | | | | | |
| 3.1 Architecture design | | | ░░ | | | | | | |
| 3.2 Database design: admin/teacher/module/student information, attendance, log-in | | | ░░ | | | | | | |
| 3.3 Interface design | | | ░░ | ░░ | | | | | |
| 3.3.1Internal interface: UI interface and software-interface | | | ░ | ░ | | | | | |
| 3.3.2 External interface: back-end interface, web | | | ░ | ░ | | | | | |
| 3.4 Component design, draw component diagram | | | ░░ | ░░ | | | | | |
| 3.5 Publish sub-system integration test plan | | | ░░ | ░░ | | | | | |
| 3.6 Publish system integration test plan | | | ░░ | ░░ | | | | | |
| **4. System prototype development and unit testing** | | | | | ██ | ██ | ██ | ██ | |

| | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|
| 4.1 Database development | | | | | 🟨 | | | | |
| 4.2 UI development | | | | | 🟨 | | | | |
| 4.3 Database management | | | | | 🟨 | 🟨 | | | |
| 4.4 Face-recognition Attendance System | | | | | 🟨 | 🟨 | 🟨 | 🟨 | |
| 4.5 Database-software and server interface development | | | | | 🟨 | 🟨 | 🟨 | 🟨 | |
| 4.6 Back-end interface development | | | | | 🟨 | 🟨 | 🟨 | 🟨 | |
| 4.7 Set test plan and test | | | | | 🟨 | 🟨 | | 🟨 | |
| **5.  Publish Interim Report** | | | | | | | | 🟥 | 🟥 |

| Time | 12/12 | 12/19 | 12/26 | 1/02 | 1/09 | 1/16 | 1/23 | 1/30 | 2/06 |
|---|---|---|---|---|---|---|---|---|---|
| Tasks\Week Index | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| **6.  System improvement and unit testing** | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | | | |
| 6.1 UI improvement | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | | | |
| 6.2 Database management improvement | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | | | |
| 6.3 Face-recognition Attendance System improvement | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | | | |
| 6.4 Database-software and server interface improvement | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | | | |
| 6.5 Back-end interface improvement | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | | | |
| 6.6 Information visualization | | | 🟨 | | | | | | |
| 6.7 Set test plan and test | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | 🟨 | | | |
| **7.  Improvement and validation** | | | | | | | 🟥 | 🟥 | 🟥 |
| 7.1 Improve UI design | | | | | | | 🟨 | 🟨 | 🟨 |
| 7.2 Validation | | | | | | | 🟨 | 🟨 | 🟨 |

| Time | 2/13 | 2/20 | 2/27 | 3/05 | 3/12 | 3/19 | 3/26 | 4/02 | 4/09 |
|---|---|---|---|---|---|---|---|---|---|
| Tasks\Week Index | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| **8. Integration and system test** | 🟥 | 🟥 | 🟥 | 🟥 | | | | | |
| 8.1 Sub-system integration test | 🟨 | | | | | | | | |
| 8.2 System integration test | | 🟨 | 🟨 | | | | | | |
| 8.3 Customer test | | | | 🟨 | | | | | |
| 8.4 Publish test documentation | 🟨 | 🟨 | 🟨 | 🟨 | | | | | |
| **9. Operation and maintenance** | | | | | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 |
| **10. Document and report** | | | | | 🟥 | 🟥 | 🟥 | 🟥 | |
| 10.1 Publish final report | | | | | 🟨 | 🟨 | | | |
| 10.2 Publish user handbook | | | | | 🟨 | 🟨 | | | |
| 10.3 Document generation | | | | | | | 🟨 | 🟨 | |