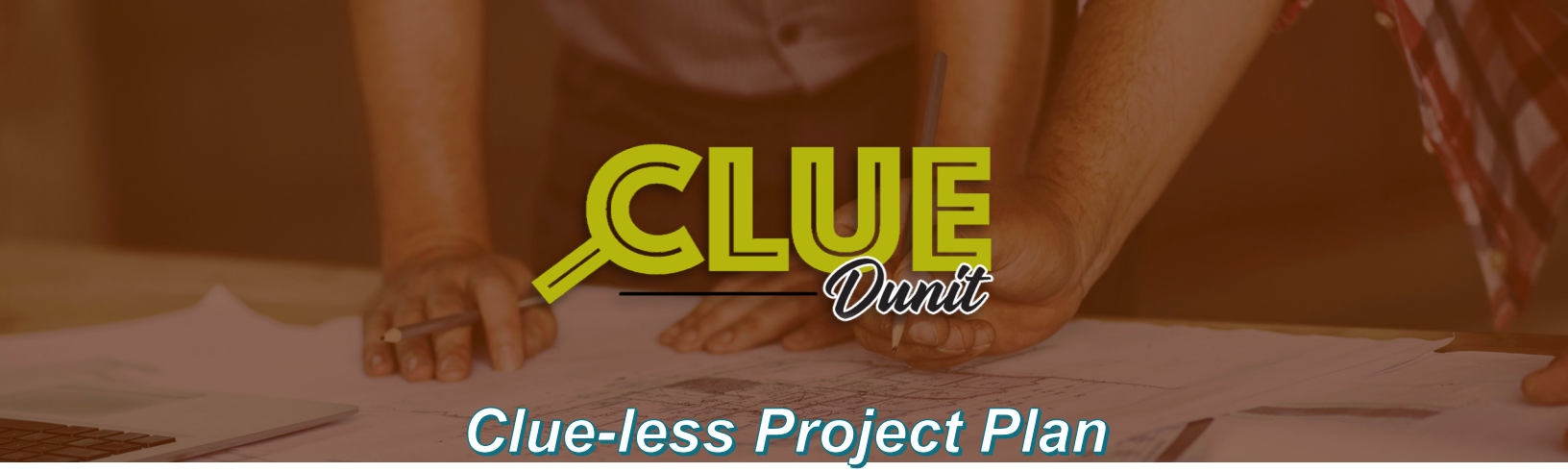


Clue-less Project Plan

Authors: **George, Linh, Troy, Kerim, Rasa**

Purpose

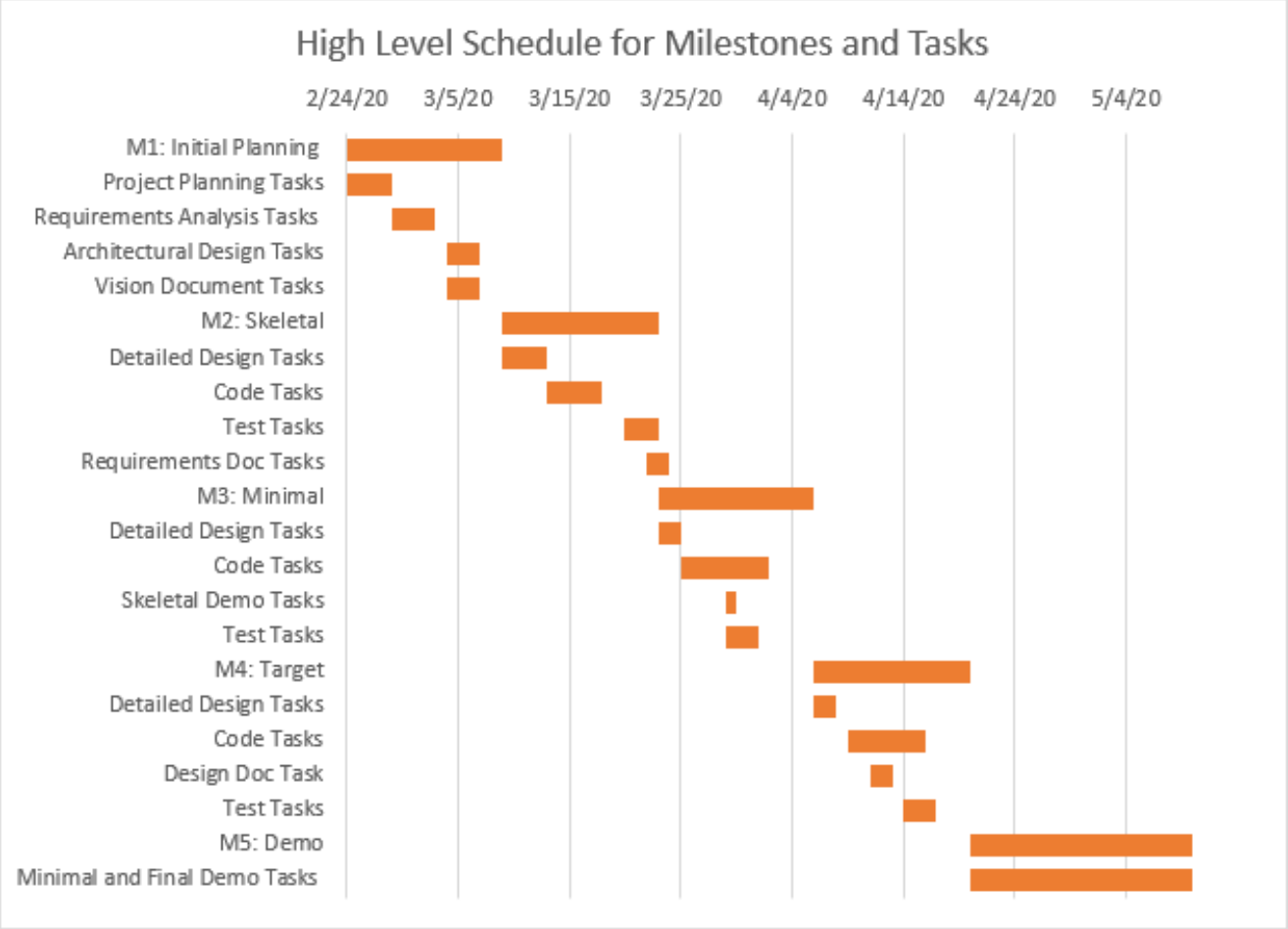
The purpose of this project plan is to document planning assumptions and decisions among project stakeholders.

- *Project objective:* to deliver the target version of the Clue-Less game
- Since the Clue-Less Project is schedule-driven, the team will use the **Design-to-Schedule Release Model**. The design will be broken into 5 milestones/stages – M1: Initial Planning, M2: Skeletal, M3: Minimal, M4: Target, M5: Final demo and hand off.
- Specifications: https://blackboard.jhu.edu/bbcswebdav/pid-7600417-dt-content-rid-86967286_2/courses/EN.605.601.86.SP20/CourseInfo/Clue-Less.pdf

Schedule

- We will have following milestones and essential dates
  - Milestone M1, **PLANNING**: 2/24 – 3/09
    - Initial planning, requirements analysis, architectural design
    - *Project Plan due (2/25)*
  - Milestone M2, **SKELETAL**: 3/09 – 3/23
    - Detailed design, code and test acceptance level, high priority tasks
    - *Vision document due (3/10)*
    - *Requirements document due (3/24)*
  - Milestone M3, **MINIMAL**: 3/23 – 4/06
    - Detailed design, code and test acceptance and system level, medium priority tasks
    - *Requirements document due (3/24)*
    - *Skeletal increment demo due (3/31)*
  - Milestone M4, **TARGET**: 4/06 – 4/20
    - Detailed design, code and test for complete integration
    - *Design document due (4/14)*
  - Milestone M5, **DEMO**: 4/20 – 5/04

- Complete full test pass and preparation for delivery
- *Minimal increment demo due (4/21)*
- *Delivery demo due (5/12)*



Milestones	Start Date	Days to complete
M1: Initial Planning	***2/24/20***	***14***
Project Planning Tasks	2/24/20	4
Requirements Analysis Tasks	2/28/20	4
Architectural Design Tasks	3/4/20	3
Vision Document Tasks	3/4/20	3

M2: Skeletal	***3/9/20***	***14***
Detailed Design Tasks	3/9/20	4
Code Tasks	3/13/20	5
Test Tasks	3/20/20	3
Requirements Doc Tasks	3/22/20	2
M3: Minimal	***3/23/20***	***14***
Detailed Design Tasks	3/23/20	2
Code Tasks	3/25/20	8
Skeletal Demo Tasks	3/29/20	1
Test Tasks	3/29/20	3
M4: Target	***4/6/20***	***14***
Detailed Design Tasks	4/6/20	2
Code Tasks	4/9/20	7
Design Doc Task	4/11/20	2
Test Tasks	4/14/20	3
M5: Demo	***4/20/20***	***20***
Minimal and Final Demo Tasks	4/20/20	20

Deliverables List

In design-to-schedule delivery, it is critical to prioritize features and tasks and plan stages so that the early stages contain the highest-priority features, leaving the low priority features/deliverables for later, therefore our deliverables are ranked.

Skeletal System – architecture's proof of concept

- Priority: 1
- Scope: client and server connection established with stub functions for critical functionality
- **Due 3/31**

Minimal System – implement critical program functionality

- Priority: 2
- Scope: all functions from skeletal form are fully integrated and working between client/server with text UI
- **Due 4/21**

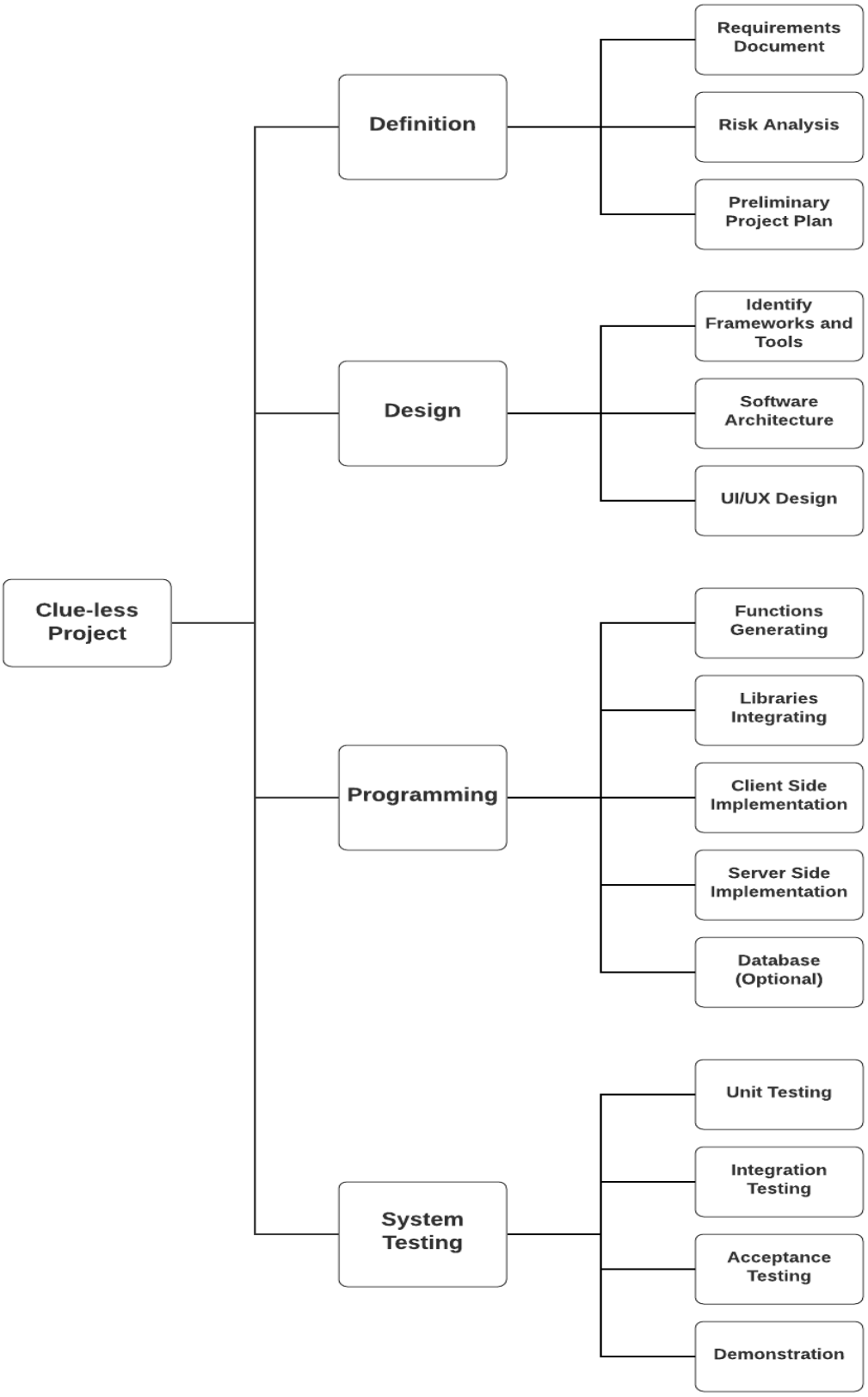
Target System – final version of the program

- Priority: 3
- Scope:
    - All functions from minimal form are working with GUI
    - Project Demo sub-tasks
- **Due 5/12**

Project Documents

- Team Charter, Priority: 0
- Project Plan, Priority: 0
- Vision Document, Priority: 1
- Software Requirement Specifications SRS, Priority: 1
- Software Design Document, Priority: 2

Work-breakdown structure (WBS)



Monitoring and Control Procedure

- Project tracking and control: GitLab
  - https://gitlab.com/team-one-foundations-se
- Project communications: Team Charter Document
  - Sync up at the beginning/end of each Milestone

Risk Assessment and Contingencies

- Distance learning and collaboration risk due to team members residing on different locales and different time zones
  - **Mitigation Plan**: Have weekly sync-ups and follow a communication protocol as defined in Charter Document. Notify team members in advance in case of absence (sick/emergency, etc.)
- Technical risks due to the learning curve of the tools (GitLab, C++, QT)
  - **Mitigation Plan**: Allow 2 extra days for learning curve. Document well and clearly comment all functions and classes. Identify technical experts in given domains who can help to unblock progress flow.
    - GitLab - Troy
    - C++/QT – George
    - UX – Linh
    - VS – Rasa, Kerim
- Schedule risks
  - **Mitigation Plan**: Carefully plan and prioritize tasks and ensure the scope for target implementation is reasonable.
- Not receiving enough feedback early risk
  - **Mitigation Plan**: Start testing early and have complete test sign off at the end of each milestones.

Quality Plan

- Software Quality Assurance
  - Coders will use Microsoft Visual Studio Code (VSC)
    - Coding style will be maintained with a formatting tool
    - VSC uses “EditorConfig” files to maintain this format
- Testing
  - Testing will be done locally and through Continuous Integration (CI) as code is uploaded to GitLab

    - Test cases will be identified as we develop the code in each milestone
        - Suite of build verification tests (BVT) aka Build Acceptance Test (BAT) cases (priority 0)
        - Suite acceptance level cases (priority 1)
        - Suite minimal/integration level cases (priority 2)
        - Suite target/integration level cases (priority 3)
        - Dream/nice to have cases (priority 4)
    - Areas to address in integration testing:
        - Performance
        - Network (if offline provide user with a warning message)
        - Error handling
        - UX testing
        - Install/uninstall
    - Additional user testing will help to identify edge cases and find and remediate defects
- Configuration Management
    - GitLab (a Git-based tool) will be used for Configuration Management (CM)
        - Continuous Integration/Continuous Delivery (CI/CD)
        - Track tasks as GitLab Issues
        - Repository of the project code and some documentation

Assumptions and Constraints

- Multiplayer game only (max player number: 6 min payer number: 3)
- English Only
- Accessibility testing will not be done
- Testing on different configurations will not be done
- We will deliver alpha version of this app with min functionality (priority 1, 2 and 3 features ONLY)
- We will not do security and privacy work for alpha release
- Average fixed broadband download speed 64.17 Mbps
- Average upload speed 22.79Mbps
- Baseline OS – Win 10