

P16487 Team Shared Vision for Phase IV

Detailed visuals

- Detailed drawings – **Zak**
 - combine subsystems to a whole system assembly in CAD
 - Include valves, sensors, hardware, materials
- Component level schematics – **Phung**
 - Component level architecture flow charts
- Flow chart from components to subsystems to system – **Phung**

Engineering requirements – **Kyle**

- account for requirements found in feasibility analysis
 - weight/structural requirements
 - heat requirements

Feasibility – **Courtney**

- simulations
- prototyping
- Follow up with subject matter experts

Create a test plan – **Kent**

- What
 - What needs/should be tested
 - What doesn't need testing
- How
 - equipment and materials needed
 - test configurations and procedures
 - pass/fail criteria
- Verification
 - Reproducibility
 - Can it be duplicated?
 - What happens if it fails?
- Summary of results
 - Test logs
 - Should have successful and failed tests
 - Should include impact of test results

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Risk assessment – Kyle

- Mitigation plans
 - Plan/design for minimal risks!

BOM

- Consider material for each component – Kent
 - Assign quantity of material needed
 - Calculate total cost of material needed
 - Consider risks of assembly
 - What if material is not enough/hard to manipulate and something goes wrong?
 - Have we budgeted for risks? [Quantify this]
- Consider accessibility of materials – Kent, Courtney
 - Determine where they can be acquired and if they are easily accessible in Nepal
 - How long will it take to acquire material? [Make sure we have enough time to get materials so the build process is not delayed]

MSD II plan

- Update project plan – Kyle
- Build timelines/goals – Phung
 - Prototyping phase
 - Test and revision phase
 - Final Assembly phase
 - Final design testing phase
- Ordering materials ahead of time – Kent
 - Do we have everything we need to start building in week one of MSD II?
 - Tools?
 - Materials?