TO: Trevor Murray

FROM: Thomas Ware

DATE:

SUBJECT: Project Charter myCalculator Project

Project Charter

1.Project Conception and Initiation

Vision, Goal or Objective of the “myCalcualator” Project is to design prototype and document the creation of a calculator with simple logic gates. This calculator must have the following:

1. Power supply and power button
   1. Solar or
   2. Rechargeable Battery And Charge unit
2. ALU made of simple Logic Gates
3. Keypad input (0-9),(.),(+-/\*),= and clear
4. Display outputs to LCD Display

Optional Implementations:

% +M -M

Project Charter Revisions

Revision may happen when the Capstone Project formally starts (January 5th 2022).

Also, if supply chain issues arise.

Research

See External Report “”

Projections

an estimate of what might happen in the future based on what is happening now

Stakeholders

**Thomas Ware, Trevor Murray, Avner Bachar, UFV and the Customer “Solutions Calculator Club”.**

Guidelines

Strategies to Manage “myCalculator” Project:

1. Manage Project with the use of a Gantt Chart.
2. Clearly define objectives with a block level diagram to identify required modules.
3. Breakdown work schedule using the Modules for Design Phase Prototype Phase Testing Phase and Documentation.
4. Generate Testing methods for each unit and the final deliverable.
5. Generate necessary Reports, Schematics, Logic Diagrams, Truth Tables, Karnaugh maps, simulations, Breadboarded circuits, Prototypes and user manuals.
6. Final Presentation.

Project Initiation

The purpose of a project initiation document is **to gather key planning information that will help steer the project in the right direction**, gain approval from stakeholders and decision-makers, and establish a clear plan for project delivery.

2.Project Definition and Planning

Project planning is **a discipline addressing how to complete a project in a certain timeframe**, usually with defined stages and designated resources. One view of project planning divides the activity into these steps: setting measurable objectives. identifying deliverables. Scheduling.

Scope and Goal Setting

The scope is simply all the work that needs to be done in order to achieve a project's objectives. In other words, the scope involves the process of **identifying and documenting specific project goals**, outcomes, milestones, tasks, costs, and timeline dates specific to the project objective.

Budget

The Project Budget is **a tool used by project managers to estimate the total cost of a project**. A project budget template includes a detailed estimate of all costs that are likely to be incurred before the project is completed. Large commercial projects can have project budgets that are several pages long.

Communication Plan

In project management, a communication plan is **an outline of how you're going to communicate important, ongoing project information to key stakeholders.** Your communication plan will help your team understand who should be getting which notifications and when to loop in project stakeholders.

Risk Management

Risk management is the **process of identifying, assessing and controlling threats to an organization's capital and earnings.** These risks stem from a variety of sources including financial uncertainties, legal liabilities, technology issues, strategic management errors, accidents and natural disasters.

3. Project Launch & Execution

Project execution is the **stage of the project where everything your team has planned is put into action.** Your team does everything it can to get projects off on the right foot.

Status and Tracking

Project tracking is a project management **method used to track the progress of tasks in a project.** By tracking your project, you can compare actual to planned progress, and identify issues that may prevent the project from staying on schedule and within budget.

KPIs

Key performance indicators (KPIs) refer to **a set of quantifiable measurements used to gauge a company's overall long-term performance.** KPIs specifically help determine a company's strategic, financial, and operational achievements, especially compared to those of other businesses within the same sector.

Monitoring

Project monitoring is **the process of keeping a close eye on the entire project management life cycle** and ensuring project activities are on the right track. The success of a project depends on a clearly defined structure.

Forecasts

Forecasting in project management is **the process of making predictions, guesses, or assumptions of the possible outcomes of a project.** These project forecasts are made through the analysis of historical project data as well as predicted future performances.

Project Updates

Project status reports are **timely updates on the progress of your projects.** Written concisely, project reports offer high-level information about project progress, so team members get at-a-glance insight into what's happening within the project

Chart Updates

Schedule updating is basically t**he task project managers carry out that relates to updating the project schedule.** It involves: Updating the project management software with actual work completed. Recording new estimates in the software

4. Project Performance / Monitoring

Project Objectives

Project objectives are **what you plan to achieve by the end of your project.** This might include deliverables and assets, or more intangible objectives like increasing productivity or motivation. Your project objectives should be attainable, time-bound, specific goals you can measure at the end of your project.

Quality Deliverables

Defines the customer's expectations for quality, the internal process and product attributes that indicate whether the quality factors are being satisfied, and the measures to be used to give visibility to the levels of quality being achieved.

Effort and Cost Tracking

The effort tracking contains **personnel expenses, consumables, investments, material overheads, payment to third parties.** Tracking of the personnel expenses means regular recording of the working hours according to the project structure. Such a recording refers to the certain work package.

Project Performance

Project performance management is the **process of creating, implementing, and managing projects** that contribute to the performance of an organization and its strategy.

1. ROI (Return on Investment)
2. Productivity.
3. Cost of quality.
4. Cost Performance.
5. Schedule Performance.
6. Customer Satisfaction.
7. Project Cycle time.
8. Alignment to strategic business goal.

5. Project Close

Project Closing is the combination of the following when applied to a project: **Assurance that all the work has been completed**, Assurance that all agreed upon project management processes have been executed, and. Formal recognition of the completion of a project—everyone agrees that it is completed.

Postmortem

A project post-mortem, also called a project retrospective, is a **process for evaluating the success (or failure) of a project's ability to meet business goals.** A typical post-mortem meeting begins with a restatement of the project's scope.

Project Punchlist

A project closure checklist (or project closeout checklist) is **used by project managers to evaluate the business outcomes when formally closing a project.** It helps assess project activities such as actual performance versus baseline objectives, unaddressed issues, and lessons learned within a project life cycle.

* Project Charter
* Plan Review
* Initiation
* Scope and Goal Setting
* Budget
* Work Breakdown Schedule
* Gantt Chart
* Communication Plan
* Risk Management
* Status and Tracking
* KPIs
* Quality
* Forecasts
* Objective Execution
* Quality Deliverables
* Effort and Cost Tracking
* Performance
* Postmortem
* Project Checklist
* Report

Report

A project management report is **an essential project management tool.** It provides a summary overview of the project's status that you can share with stakeholders, clients and team members.

Sample Charter:

