CONFIDENTIAL PROPRIETARY INFORMATION
Inter-Company Memo from:
DYZINE TEK LLC
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MEAL App Design Overview

This document describes a responsive web app formatted primarily for mobile devices but usable on PCs that replaces manual Machine Entry Authorization Log (MEAL) books. The app must provide the following features:

1) Be accessible on any device that is connected to the Internet, including mobile phones (primary use-case), tablets or PCs running Windows, IOS and Linux with WiFi or LTE.
2) Be a delivered set of code to be managed and serviced by SGVI. Not to be a SaaS solution with any type of subscription. The system is not planned to be run "in the cloud" but on company servers, running Windows Server 2022 with support to migrate to 2025.
3) Support the functions of a standard MEAL book system:
    a. Allow for identification of the machine being entered, primarily by scanning a QR code (requires camera access and QR decoding of the Asset Number embedded in the QR Code).

       Every machine will have a globally unique QR code printed on the inside of the cabinet that contains a web link to https://sgvi-ops.com:47999 where the app will be and passes in the Asset number via embedded Query Parameters. The asset number is also printed in plain text, so if the camera or QR is not readable, the asset number can be entered manually, if in the app.

    b. Every scan or manual entry of an asset number starts an Entry Authorization Transaction (EAT), with ENTRY Time/Date stamp tied to the device's clock's Current Time. This is a GUID that includes the asset number and a sequential transaction ID starting at 100001 and incrementing 1 for each transaction.
    c. The EAT is a record in a database held on a server. The design specification is open to any database that can be protected online via Segmentation or Front End Processing (FEP) type system and can store BLOB data.
    d. RBAC security must include, at a minimum, login credentials, to be able to access the service. Pre-authorization via data entry into a secure part of the server or front end processor service is preferred. It may be necessary to add whitelisting of hardware devices, either via a stringent

enrollment process that deposits credentials into local secure storage (tokens or pass-keys) or by MEID /MAC address manual entry at the server / front end processor service that would require interrogation and retrieval of that data from the device upon login.

e. Allow a screenshot of meter information to be stored as the first event entry upon starting a new Entry Log Transaction.

f. Have places on the page form for manual entry of “Starting Values:” “METER A”, “METER B”, “METER C”, “METER D” and “METER E”.

g. Provide for the entry of a REASON FOR ENTRY: This should be a free-form data entry field of at least 256 ASCII characters that can search this same field in all other EATs for all machines for character matches and offers auto-complete. Over time, it is expected that Auto-Complete will be used to help unify entry spelling, but a drop-down list is too restrictive for all the potential use-cases.

h. Provide for entry or WORK PERFORMED: This should be an extensible multi-media container akin to HTML Email, where text and pictures can be added in-line. As much formatting flexibility as in Outlook HTML Emails or Microsoft Word would be ideal, allowing graphics to include Drawing Objects like arrows or lines or circles (both filled and non-filled). Wrap Text options would be welcome as well.

   The whole concept is to make the EAT as descriptive as possible, as it becomes a permanent record of work performed on the machine. By making the UI powerful and robust, user buy-in increases and pride in being complete in the documentation is more likely.

i. Provide a place to describe parts being replaced, including serial numbers of the parts.

j. Provide for a screenshot of Ending Meter values

k. Have places on the page form for manual entry of “Ending Values:” “METER A”, “METER B”, “METER C”, “METER D” and “METER E”.

l. Provide a SAVE and CLOSE button, that marks the End of Entry time and date by the Current Time.

m. Either via a Tabbed Interface or a HOME screen, support the ability to Review Prior Accesses by entering an asset number manually or via a QR code that will be available on the outside of the machine. This QR will not have the Web link, just the raw Asset number, so that a tech or admin can review prior accesses without opening the machine, which would instigate a new EAT.

   The Review of Prior Accesses would start with a list of EAT numbers, the Time and Date of the entry, and the Reason. By selecting a transaction, the details of the transaction are rendered, showing the meter screenshots and Work Performed sections. A way to close this view and return to the list, as well as close the list and return to Home would be needed.