CLAIMS

1. **QuantWater: Personalized Mineralized Water System – Independent Claim**
   A system for producing personalized mineralized drinking water, comprising:
   - a sample collection module configured to obtain body fluid samples from an individual;
   - an analysis module operable to determine the levels of targeted minerals, vitamins, and bioactive compounds in the body fluid sample;
   - a computing module configured to calculate an optimal formulation of minerals, vitamins, and supplemental additives tailored to the individual's unique health profile based on the analysis;
   - a mineralization module configured to accurately blend the computed formulation with distilled water to create a personalized mineralized water product; and
   - a delivery module configured to distribute the personalized mineralized water to the individual,

     wherein the system further integrates body fluid sample data with laboratory services and healthcare providers to facilitate ongoing monitoring and adjustment of the formulation.
2. **HyperSign: Native HTML Form Integration Protocol – Independent Claim**
   A computer-implemented method for dynamically creating and integrating interactive web forms within a document, comprising:
   - detecting a drag action on a selectable HTML element within a source document;
   - identifying a target HTML element selected from a group comprising table cells, paragraphs, divs, spans, headers, lists, and other display elements;
   - dynamically embedding a corresponding form field into the identified target element while preserving the document's structural integrity and adjusting display properties for inline or block presentation; and
   - automatically integrating the created form fields with the software's back-end database.
3. **Adaptive Reweighting System – Independent Claim**
   A continuous reweighting system for a machine learning model, comprising:
   - a data acquisition module configured to capture streaming data with associated credibility metadata;
   - a preprocessing module to normalize and tokenize the streaming data;
   - an adaptive reweighting module employing an online optimization algorithm to compute weight updates based on the preprocessed data;
   - a content differentiation module designed to distinguish between opinion-based content and verifiable, action-backed statements and to assign factuality scores to data inputs;
   - an audit verification module configured to compare generated outputs with trusted reference data and provide feedback for corrective reweighting; and
   - a monitoring and control loop configured to evaluate model performance and trigger the adaptive reweighting module when performance metrics or factual accuracy deviate from predefined thresholds.
4. **(Dependent Claim on Claim 3)**
   The system of claim 3, wherein the adaptive reweighting module further comprises a

regularization mechanism designed to mitigate catastrophic forgetting by incorporating historical data from a memory buffer.

5. **(Dependent Claim on Claim 3)**
   The system of claim 3, wherein the content differentiation module includes:
   - an opinion detection submodule that utilizes natural language processing to identify subjective language markers; and
   - a fact-based analysis submodule that cross-references content with external verified sources to confirm the presence of objective, action-backed data, wherein a factuality scoring mechanism influences the weighting of data during the reweighting process.
6. **(Dependent Claim on Claim 3)**
   The system of claim 3, wherein the audit verification module comprises:
   - a reference comparator that accesses a controlled repository of authoritative data;
   - a discrepancy detector that identifies deviations between generated outputs and reference data; and
   - a feedback integrator that communicates discrepancies to the adaptive reweighting module for corrective updates.

CONCLUSION

This application discloses a comprehensive suite of innovations designed to revolutionize personalized health solutions, dynamic web form integration, and adaptive machine learning model reweighting. By providing tailored mineralized water based on individual analyses, enabling native HTML form creation that seamlessly integrates with enterprise systems, and continuously updating machine learning models with integrated audit verification and content differentiation, the inventions described herein offer significant improvements over the current state of the art.