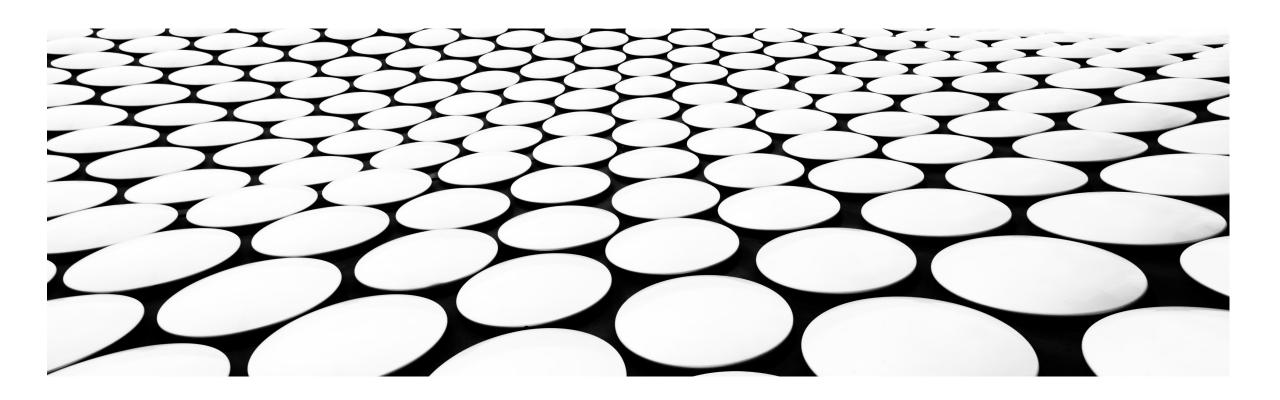


TEVIOT'S PRODUCT DEVELOPMENT PROCESS





Specification

A complete understanding of the requirements, allows us to create a robust, agreed design specification.



Proposal

With the specification, we are able to generate a reliable cost and a project time scale.



Feasibility Study

A good way to understand whether our goals are achievable, which then gives us the confidence to invest further in our design project.



Concept Design

Compile aesthetic guidelines including existing product examples, materials, finishes, textures and colours, often shown with 3D modelling, which gives a more accurate assembly costs.





Design for Manufacture

From this point on, more emphasis is put on doing all our designs for low-lost and high-quality manufacture, mitigating manufacturing risks, including dry joints, loose parts.



Circuit Design

Schematics are carefully reviewed against the design specification, before proceeding to PCB layout. An automatic PCB assembly Bill of Materials (BOM) is also produced at this stage.



Mechanical Design

A 3D model of the mechanical design is worked on for manufacturability as well as for PCB shape and size and component heights and their potential locations.



PCB Layout

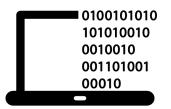
Based on the PCB shape and size and it's component height restrictions, the PCB layout gets done. PCB manufacturability and testability is a very important part of the design.





Prototyping

The PCB and the mechanical parts are manufactured and assembled, ready for firmware development and thorough testing.



Firmware Development

Our firmware is developed based on the specification and the flowchart



Verification

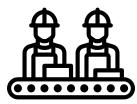
Verification is an integral part of all our design stages. In addition, each product is verified against Test Specifications.





Approvals

Our products are designed with all the final product approvals in mind, and where needed, we do precompliance testing, including environmental tests 9temperature, vibration) and EMC.



Pre-Production

Small production batches allows us to discover production issues early, which can save significant resource later down the line.



Application Development Stages



Specification

This is the top-level description of what the app is about. This helps the development team on the same page and helps them understand what the requirements and their priorities.



Wireframing & Storyboards

Wireframing is a schematic blueprint; a visual guide that represents the app layout, the flow between the screens and its functional representation informed by our app project objective.



Backend Structure

Wireframing and storyboards help with building a Backend structure. These include, APIs, data diagrams, servers, data integration, and push notification services.





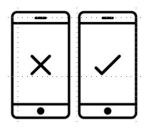
Prototyping

It is important to have an iterative approach at this stage, and present as many mock-ups to our users as possible, allowing our plan for the app's functionality adapt and evolve.



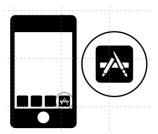
Developing the App

The development stage is where we begin to write the code for the "final" version of app. This is where we use the received feedback from the wireframing and prototyping stages and make some final decisions. Also, integrating an analytics engine into your app during this phase is critical. It's important to know user interactions and be able to see how our app is being used and the general flow of users.



Testing

Ideally, testing occurs in parallel to the development stage. It is important to continually test to keep post-release costs low. Unit tests, UI tests, and integration testing are necessary to ensure that you work out any major bugs or oversights as early as possible.



Release and Maintenance

This is where we submit our app as a private app, to the App Store of Play Store for approval. After releasing the app, we will be reviewing feedback from our users, potentially adding new features, and then releasing it again.

CUSTOMER'S PROJECT DETAILS FORM

https://teviottechnology.com/enquiry/



Please Enter Your Requirements

Submit

All Teviot Ultra-Smart products come complete with Wifi, Bluetooth, I2C, SMBus1.1 and LED Fuel Gauge display. They also have all the voltage, current and temperature protections required for safety. However, if you require a secondary voltage, current and temperature protection, please check the indicated boxes, below.

First Name	Last Name	Phone Number
Company Name	Website	Email
Please describe the application, including loading, such as motor, input capacitance and the environment. Please attach all relevant documents, ideally as a zip file, e.g. Mechanical dimensions, Connectivity, System Design, etc		
Cell Chemistry	Pack Capacity	Nominal Voltage
Pick Discharge Current & Time	Average Discharge in Amps	Maximum Continuous Discharge Current in Amps
Overcharge Voltage Over.Discharge Voltage	Over Current Short Circuit	☐ Over Temperature ☐ Under Temperature
Approvals Required	Prototype Quantities & Expected Dates	Production Quantities & Expected Dates
Choose File no file selected		