WBS Element/Personnel	Work Package Type	Work Package	Project Manager	Hardware	Software	Testing	Sponsor	Other	Work Package Duration (Days)	Work Package Labor (Person Hours)
project	Project						_			
Market Analysis	Phase									
Materials Research	Activity									
Battery Research	Activity									
Battery Types	Activity									
Lithium Ion	Activity									
Cell Chemistry	Subtask	1.1.1.1.1.1								
Cathode Materials	Subtask	1.1.1.1.1.1.1.1	R	L		Р	I		2	16
Anode Materials	Subtask	1.1.1.1.1.1.1	R	L		Р	I		2	16
Electrolyte Composition	Subtask	1.1.1.1.1.1.1.1	R	L		P	I		2	16
Form Factor	Subtask	1.1.1.1.1.1								
Cylindrical	Subtask	1.1.1.1.1.1.1	R	L		P			2	16
Prismatic	Subtask	1.1.1.1.1.1.1	R	L		P			2	16
Pouch	Subtask	1.1.1.1.1.1.1	R	L		P			2	16
LiFePO4	Activity									
Safety Features	Subtask	1.1.1.1.1.1								
Thermal Management	Subtask	1.1.1.1.1.1.1	R	L		Р	I		2	16
Overcharge Protection	Subtask	1.1.1.1.1.1.1	R	L		P	I		2	16
Short Circuit Prevention	Subtask	1.1.1.1.1.1.1	R	L		Р	I		2	16
Battery Capacity	Subtask	1.1.1.1.1								
Power Requirements	Subtask	1.1.1.1.1.1	R	L	Р	Р	I		2	16
Usage Duration	Subtask	1.1.1.1.1.1	R	L	Р	Р	I		2	16
Size Constraints	Subtask	1.1.1.1.1	R	L		Р	I		2	16
Battery Safety	Subtask	1.1.1.1.1								
Temperature Control	Subtask	1.1.1.1.1.1	R	L	P	P	Ι		2	16
Protection Circuits	Subtask	1.1.1.1.1.1	R	L	P	P	I		2	16
Certification Requirements	Subtask	1.1.1.1.1	L	P		P	I		2	16
Battery Suppliers	Subtask	1.1.1.1.1								
Vendor Selection	Subtask	1.1.1.1.1	L	P			I		2	16
User Needs Analysis	Phase									
Target Audience Research	Subtask	1.1.1								
Demographics	Subtask	1.1.1.1	L				I	P	2	16
Usage Patterns	Subtask	1.1.1.1	L				I	P	2	16
Purchase Behavior	Subtask	1.1.1.1	L				I	P	2	16
User Pain Points	Subtask	1.1.1								
Current Solutions	Subtask	1.1.1.1	L	P	Р		I		2	16
Unmet Needs	Subtask	1.1.1.1	L	Р	Р		I		2	16
Feature Requests	Subtask	1.1.1.1	L	P	Р		I		2	16
Build	Phase									
Component Sourcing	Activity									
Battery Procurement	Subtask	1.1.1.1								
Supplier Selection	Subtask	1.1.1.1.1	L	P			I		2	16

Project Totals					
Total WBS Boxes:	42				
Total Phases:	3				
Total Activities:	6				
Total Work Packages:	32				

Key										
L = Lead	P = Participant	R = Reviewer	I = Input	Project	Phase	Activity	Subtask*			
* Subtask rows are colored to match their corresponding level in the WBS diagram										