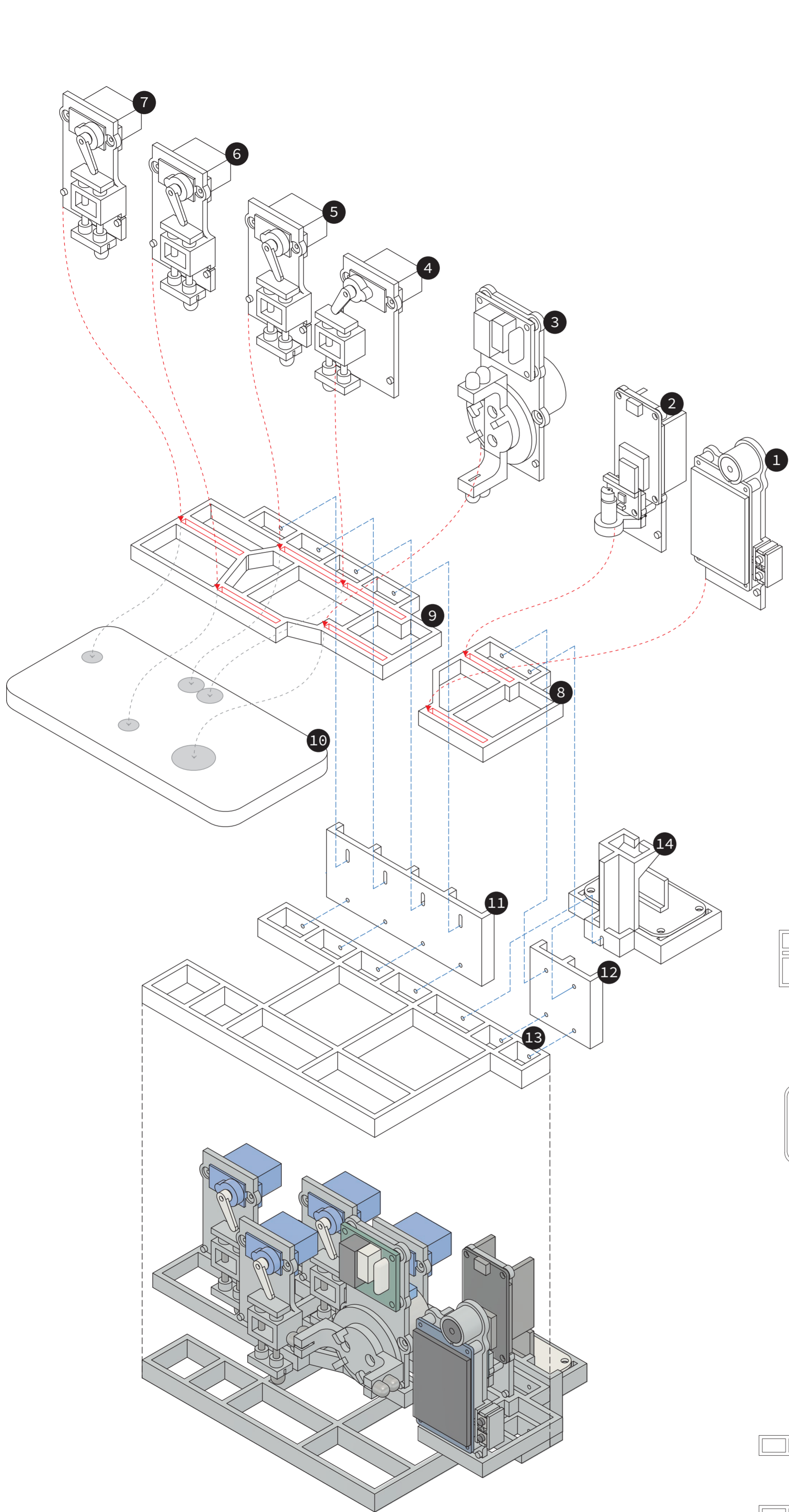
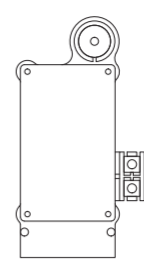


FULL-AUTOMATIC IMMATERIAL LABOURING SERIES

F.A.I.L.S.



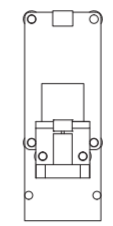
1 User Interface Module



Components
 240*320 LCD Screen
 Buzzer
 Buttons

What for
 It displays the working process and feedbacks of the machine in real time.
 It allows user to start and restart the machine.
 It provides the sound feedback to the user.

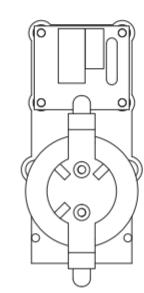
2 Computing & Randomness Module



Components
 ESP32 Dev Kit Microcontroller
 Vibration Motor
 MPU6050 Accelerometer

What for
 It controls and coordinates all the functional modules.
 It generates physical randomness by sensing the motion of the vibration motor vibrating in random rate.
 It turns physical randomness into random decisions to control what and when the machine operates.

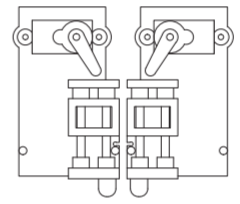
3 Scrolling Module



Components
 Replaceable Conductive Tips
 CR2032 3V Lithium Battery
 28BYJ-48 Stepper Motor
 ULN 2003 Stepper Motor Driver

What for
 It replaces users' finger movement and automatically scrolls down the video stream based on random decisions.

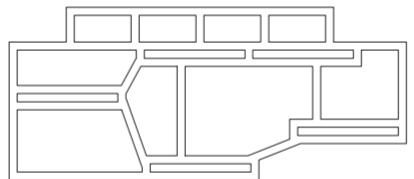
4 5 6 7 Clicking Modules



Components
 SG90-9G Servo Motor
 3mm metal rod,
 Spring
 Replaceable Conductive Tips

What for
 They click on the content appeared on screen based on random decisions.
 The Clicking Module A clicks the 'Dislike' button.
 The Clicking Module B clicks the 'Research Results' area.
 The Clicking Module C clicks the 'Like' button.
 The Clicking Module D clicks the 'Search' button.

8 9 Chassis



Components
 Plastic Structural Parts

What for
 They are programmable modules holder that hold all functional modules in position and offer the flexibility for targeting different digital content on the phone.

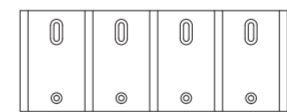
10 Digital Devices (not included)



Components
 Digital Devices (not included)

What for
 It is the targeted digital Devices.
 It is able to work on different digital devices like Android Phone, iPad, etc with different Chassis.

11 12 Vertical Support



Components
 Plastic Structural Parts

What for
 It holds the chassis in proper height.
 It offers the spring-like flexibility when functional modules are working.

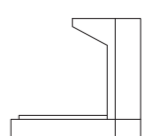
13 Base



Components
 Plastic Structural Parts

What for
 It holds the digital device in position.
 It supports all structures above it or attached to it.

14 Extension Socket



Components
 Plastic Structural Parts
 Circuit Board

What for
 It holds and organises wires.
 It holds Circuit Board in position.

Ways of Assambling

- Slot Connection
- Screw Connection

Functions of Modules

- Interaction