Scrum 4

EK691 Team 2:
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Product Demonstration

Basic Monitor, track infant breathing at your convenience (Functioning IR sensor → RPi processing → IoT/Web visualization)

Access our data stream on your mobile device:
https://plot.ly/~atomicwest/59/breathing-monitor/

List of Tasks (Scrum 4 Goals from Scrum 3)

| Member	Content Aspect	Tasks
Molly	Crib Module/CAD model	Get 3D printed model *into hands* of parents. Try out fit on cribs in-store: flexibility, multi-use matching
Gary	Crib Module/CAD model	Hands-on feedback from parents about use: how important is portability? One-handed use? Battery vs power cord?
Bruce	Materials Research	Focus on the cover. Try to determine it's material. Do the research from mechanical and chemical properties. Do the research of painting that can be used on the cover.
Don	Breathing Sensor/Manufacturing	Performance data analysis for Raspberry Pi. Sorting data put their value into real situation. Start build a website for data collection and make value more visible
Jesson	Breathing Sensor/Smart App Capability	start building the Raspberry Pi module, try to demonstrate a basic/complete data stream from RasPi sensor (or Kinect if possible), perform some analysis, then transmit to the cloud

Backlog - Trello

https://trello.com/b/Q1thhFPi/scrum-4

Total completed points (degree of difficulty)/project velocity

example
the way forward …

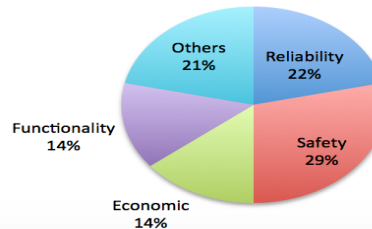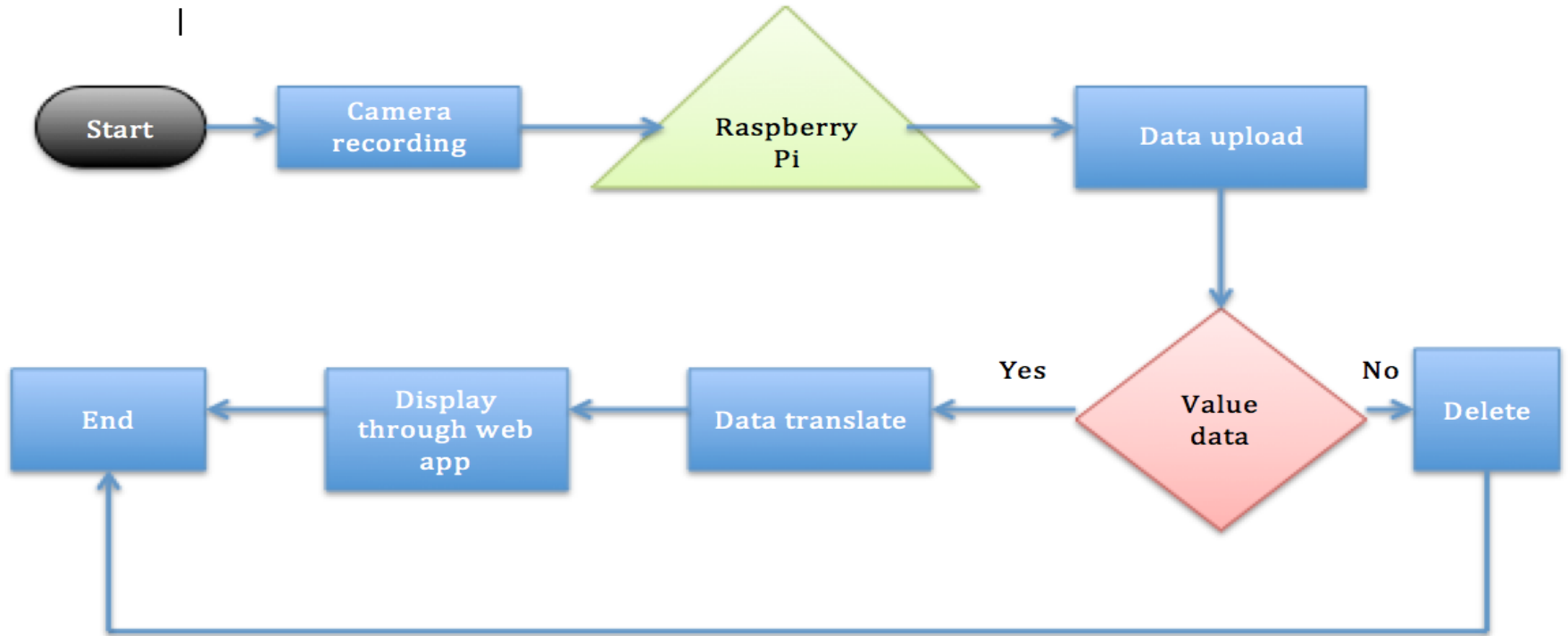| System: Convert Customers feedbacks into numerical data | 15 |
System: Create Raspberry Pi working flow diagram.	15
System: Data analysis with customer feedbacks. Ranking the customer's preference.	25
System: Statistical method to predict large customer population	10
System: Assist, support teammates Raspberry Pi building	15
System: Set up data cloud for the Raspberry Pi.	20

Total: 100
What I Get: 15+15+25+10+15 = 80

Burn up Chart
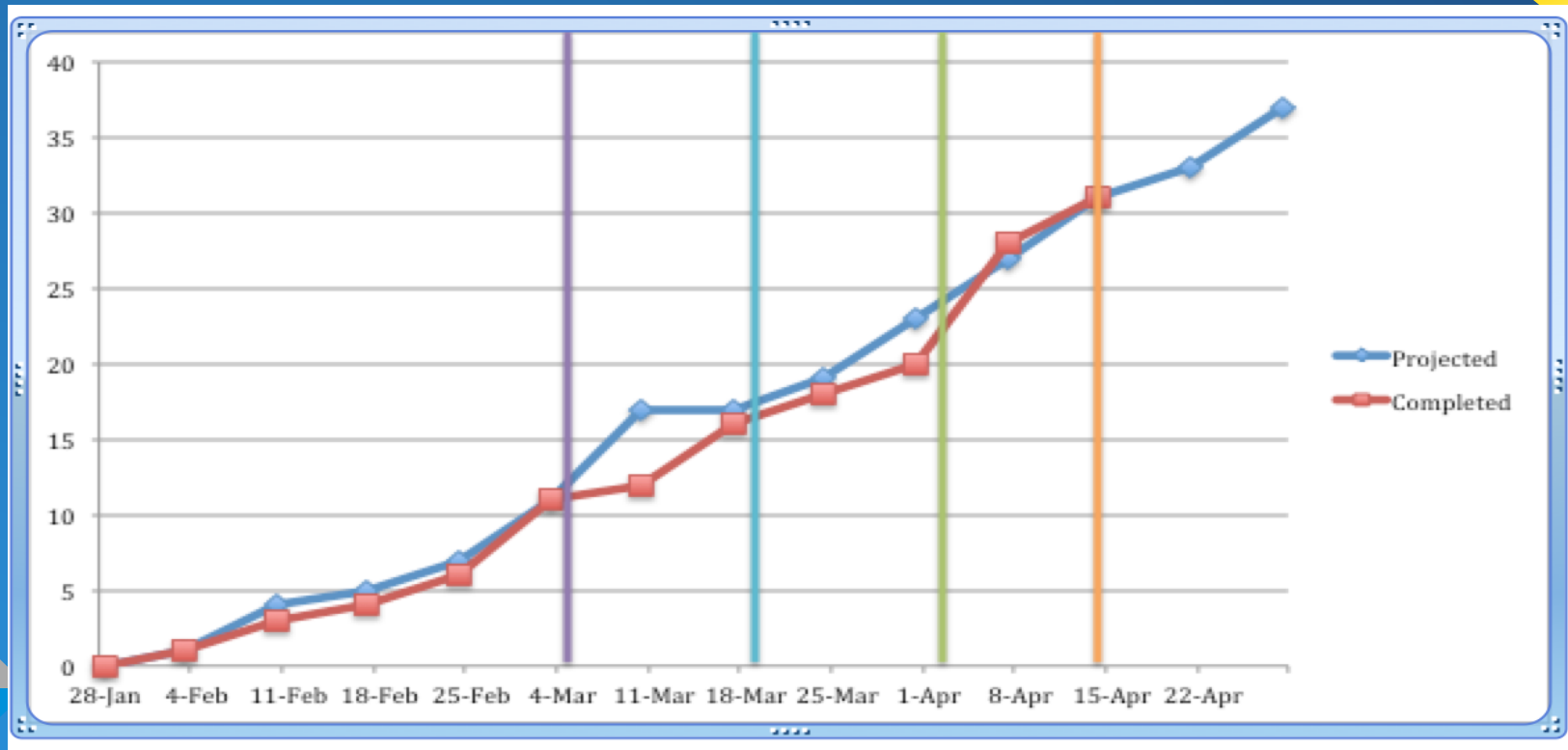
Customer Feedback

Date	Who	content	Effect and change	
22-Feb	Parent A	1.Reliability	Signal research	
		2. Safety	SIDS concept learning	
28-Feb	Parent B	1. Economic	Reduce cost	
		2. Ethtic issue with baby reasearch	Use legal database	
1-Mar	Parent C	1. Safety	not use fur matertials	
10-Mar	Parent D	1. Functionality	Alarm Setting	
14-Mar	Parent A	1. Aesthetic	CAD Opitmization	
		2. Reliability	Material test	
		3. Econmic	Reduce cost	
25-Mar	Parent E	1. Safety	SIDS concept learning	
10-Apr	Parent F with mutiple kids	1. Safety	SIDS Mathmatical model	
		2. Comfortability	Material touching	
		3. Reliability	Testing	
11-Apr	Parent F with mutiple kids	1. Functionality	reliable material	

Reliability		3
Safety		4
Economic		2
Functionality		2
Others		3

Customers Preference

Reliability 22%
Safety 29%
Economic 14%
Functionality 14%
Others 21%

Flow diagram for Pi

Sprint review Scrum 5

Scrum 5

Sensor Platform (Jesson): fine-tune data readout of the IR; try to integrate streaming data with camera stream into one webpage/web-app; automate RPi system

System (Don): Building the Cloud database, finished the large population prediction. Continuing assist Raspberry Pi Building.

Material (Bruce): Continue the material research, try to determine the optimal material; Do the research of painting; Coordinate with other teammates

Mechanical (Molly & Gary): Use new sensor & microprocessor shape to reduce the size of product. Use new flexibility to create more portable product (from Customer Feedback)