COMPARISON REPORT ON FRONT END FRAMEWORKS

NAME	POLYMER	ANGULAR	REACT	VUE	EMBER
Popularity	19,013	57,839	86,012	80,350	18,630
Job Market	0	264	257	21	24
Setup	Moderate	Easy	Difficult	Easy	Easy
CLI	Yes	Yes	Yes	Yes	Yes
Syntax	Easy	Moderate	Difficult	Easy	Moderate
Learn Curve	Moderate	High	High	Moderate	Moderate+
Product of	Google	Google	Facebook	None	Microsoft
Starting Year	May 2015	Oct 2010	Mar 2013	Feb 2014	Dec 2011
Stable Version	2.0.2 Jul-17	1.6.8 Dec-17	16.2 Nov-17	2.5.9 Nov-17	2.16.2 Nov-17
Reliability	Good	Moderate	Moderate	Good	Worse

Popularity - Popularity is determined by how strong the community of the frame work is and how many members currently using the framework and working on it. It also tell us about how many people are contributing to the solution or code on that framework that gives us an idea about the presence of tutorials and code solutions and web components available to work on online and in Github. The source of popularity determination is the Stars given to the framework on github.com

Job Market – This gives us an idea about how much the framework is popular or being used in industry. This gives us an idea that learning which framework will help us more in getting a job in industry. It also depends on the area you want to get job for example if we look at the top two popular frameworks React and Angular. Angular is used worldwide but it is more popular in INDIA on other side React is very popular in U.S.A as an Industrial point of view. The number of jobs provided in table is taken from indeed.com and area is of Melbourne City, Victoria only.

ANGULAR:-
- Easy Setup – The setup is easy to install and get starting up.
- Type Script – It uses type script language which is similar to Java Script but still different that adds to the learning Curve to use Angular.
- Angular CLI – It has its own Command Line Interface which increases the rate of development of the components and implementing it.
- Testing Environment 'JASMINE' – It also has its native testing environment called JASMINE.
- Java Script Inside HTML - It uses weird mix of Java Script inside Html Tags which is in initial phase little hard to get used to it.

REACT
- Difficult Setup – Setup is not that easy to do.
- Virtual DOM – It has virtual DOM function which makes faster and easier deployment of the code.

- Uses Pure Java Script – It uses the Java Script in pure form no mixing up of other language to perform the functions only.
- JSX Special Template Language – To make template and web components it has also its own special template language.
- REDUX – To use the Database is 'Difficult in Beginning' it is little different than the usual My Sql database in commands and connection.
- Mixes JSX, JavaScript, HTML – It mixes up the html tags in a very weird way. We have to use all the HTML tags inside Java Script Tags.
- Learning Curve – Due to all these native setup it adds great efforts to learning curve and in getting used to all the new stuff in initial phase.
- Facebook is behind React and controls all its updates and component development.

EMBER
- Easy to Setup – It is easier to setup but poses some errors some times.
- Ember CLI - It has its own CLI as well which makes development faster.
- Simple Syntax – Syntax is simple as compare to other two above.
- Does Not Mix Java Script and HTML – It gives us advantage that it does not uses the mixing up of Java Script and HTML
- Reliability - Its reliability is worse than the others it will run sometimes and will not run other time. It is not reliable and worse as compares to others.

VUE
- Easy to Setup – It is very easy to set up it does not need bower one step less than others.
- VUE CLI – It also has its own CLI which makes faster development and deployment of the project.
- Easy to Learn – It is easy to learn and work on.
- Does Not Mix Java Script and HTML – It gives us advantage that it does not uses the mixing of Java Script and HTML.
- Very Natural Looking Tags – Its tags are follows a very natural order which helps to better understand and learn to work on VUE.
- No popular company backs up VUE Frameworks.

POLYMER
- Moderate to Setup – It has moderate level of setting up for complete new person it can take time to go through all procedures.
- Polymer CLI – It has its own command line interface for faster development and deployment of the project.
- Easy to Learn – It has many web components in its library which are easy to deploy and learn how to load and deploy them.
- Backed by Google – It is backed by Google and Google is working on to make its polymer web components as standard in W3C society.