*1.Title:*

《**What Happened in the China’s Past Decade?》**

*2.Group Members:*

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| Name | Student ID |
| Jiang Xinhou | 3035347990 |
| Yang Yonggui | 3035348633 |
| Yu Qingtian | 3035348918 |
| Wang Kaili | 3035348114 |

*3. Project objectives:*

1) Display various aspects(population, housing, technology, environment, culture, education etc.) of China in the past decade to help people look back the changes of the whole society vividly.

2) Analyze the connection among these aspects and the overall trend and get some valuable conclusion.

3) Find and design proper visualization diagrams and interaction ways to help people exactly under stand the data and data connections efficiently.

*4. Source and background of the data:*

Data source link: <http://data.stats.gov.cn/>

The data is selected from data.stats.gov.cn and we focus on the annual data module, specifically, the agriculture/industry/environment/tourism data in the past ten years. We select some topics like agricuture, GDP, architecture, tourism, construction and some of the like and download the data of different provinces or main cities about the above topics in the past ten years(we can only get the updated data from 2005 to 2014) for analyzation and visualization.

*5.Questions about the data:*

None.

*6.Tasks:*

1. Search some typical data of the selected topics in China and filter the data for visualization use.

2. Visualize the selected data of four aspects in China, mainly including tourism, industry, agriculture and transportation from different perspectives and apply various efficient visualization skills and principles.

3. Select or design corresponding visualization diagrams to help people have an insight into the data precisely and directly.

4. Show the trend of these aspects in the past 10 years and try to dig out more potential and valuable information or conclusions from different view with various methods.

*7.Visualization tools and approaches:*

1) Use Tableau to display some fundamental data.

2) Program with D3.js to show some data that have some special design need for flexibility, which can not be accomplished with some visualization software.

3) Other visualization tools may also be applied according to the requirement.

8. Labor division:

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| Name | Task |
| (Commen Task) | i). Search data from various sources and select a visualization topic.  ii). Data filter and processing.  ii). Overall trend analyzation and potential information, connection finding. |
| Jiang Xinhou | i). Analyze and visualize the data of tourism in china in the past ten years, the data mainly include the development of Chinese tourism(international and domestic)，tourists’ age/gender/nationality and tourism exchange revenue.  ii). D3.js learning and relevant design. The visualization process of this part will be finished mainly by programming with D3.js.  iii). After visualization, analyze the connection between tourism and other aspects like agriculture, environment, population, peoples’ income etc.  iv). Also compare the data among different regions in China. Apply multi-dimensional comparison method. |
| Yang Yonggui |  |
| Yu Qingtian | i). Display the amount and profits of State - owned industrial enterprises, private industrial enterprise and Foreign - invested industrial enterprises.  ii). Show the Regional distribution of industrial enterprises of China.  iii). Analyze the relationship between industrial development and environmental and energy. |
| Wang Kaili | Chose coastal ports and inland ports, showing the variation trend of berth length, the number of berth and other attributes in the past 10 years. |