

This Doc	goo.gl/IBJIDX
Live Service	TBD
Code repository	https://github.com/crzndx/AMOS-SS14-Group-3
Additional materials	
1. Storyboard	https://github.com/crzndx/AMOS-SS14-Group-3/blob/master/planning/storyboard17.04.pdf

SOLYP Mangement Dashboard Vision

The SOLYP management dashboard application is a data visualization tool specially developed for top level management (including the CEO). The application contains an easy-to-read, easy-to-use, multi-page and "Powerpoint" like user interface, which shows several graphical representations or visualizations of historical and current data and KPIs. The application has at least two elegant controls for efficient operation and optimal usability of the visualizations. The application contains high-level information and also lower level data, so the users can drill-down and see different levels of data aggregation. The application is developed as a tablet application for a Windows environment. The communication with SOLYP's web service back-end is out of the scope of this project. A simplified minimal back-end developed on JSON, jQuery or Java can be considered for this project purposes. Key technologies for development are HTML5 and JavaScript.

Application User	A user of this application is a (human) who has a user account and logged into that account. According to some certain action, user can view different kinds of data.
Gesture	The gesture here mainly mean the gesture which is used to interact with a tablet. For example scrolling to the left or right, use five fingers to close the application.
Card dashboard	Card dashboard is a dashboard which shows some cards on the screen. Within a card, you can see the related data to a certain company or a product. You can also have a compare functionality in card dashboard, which means you can compare your company data with your competitors or you can compare similar products from your company or from others.
KPI	KPI stands for Key Performance Indicator, which is a type of performance measurement. An organization may use KPIs to evaluate its success, or to evaluate the success of a particular activity in which it is engaged.
Visualization	Here visualization means data or information visualization. Charts, graphs, images and other visualization methods are used for presenting the data. In this application we focus on visualization which also means we focus on the creation of approaches for conveying abstract information in intuitive ways.
JSON	JSON (JavaScript Object Notation) is a lightweight data-interchange format. It is easy for humans to read and write. It is easy for machines to parse and generate. It is based on a subset of the JavaScript Programming Language, Standard ECMA-262 3rd Edition - December 1999. JSON is a text format that is completely language independent but uses conventions that are familiar to programmers of the C-family of languages, including C, C++, C#, Java, JavaScript, Perl, Python, and many others. These properties make JSON an ideal data-interchange language.
Line Dashboard	Line dashboard is a dashboard which shows a line chart of different KPIs on the screen. With this line chart, you can know a certain KPI with different products/companies. You can also compare different products' KPI in a defined time in line dashboard.
Main Cards Page	The main page that contains the cards dashboard.
All Cards Page	A secondary page that contains a summarized version of the card dashboard and displays smaller tiles with the logo/name of the card.

Release	1					
No Sprints	6					
Due Date	28.05.14					
Sprint #	Theme	User Stories	Est. Size	Real Size	Burn-Down	Dev Speed
0						
1	Organizational Aspects	0	0	0	147	0
2	Application Startup	1,2,3,4,5,6,	10	13	137	7
3	Cards Dashboard General	7,8,32,33,35,36,40,42	26	29	111	14
4	Cards Dashboard Details	10,19,28,47,48	18	22	93	16
5	Cards Dashboard Input Data	49,50,51,52,57,69,70	26	22	67	17
6	Finalize Cards Dashboard and Start New Dashboard	44,46,66,71,73,75,76,78,79,80,94	48	46	19	22
7	Cards Dashboard Tests, Simple version of Line Dashboard	29,87,88,89,90,95	19	17	0	21
Total			147	149		
Release	2					
No Sprints	6					
Due Date	09.07.14					
Sprint #	Theme	User Stories	Est. Size	Real Size	Burn-Down	Dev Speed
					116	
8	Starting the Square Dashboard	74,98,99,100,104,119	20	20	96	21
9	Improve Dashboards Details	77,97,101,120, 37, 30	22	22	74	21
10	Square Dashboard Details and Finish Line Dashboard	67,116,122,123,124	21	22	53	21
11	Finish all functions in four visualization	105, 107, 110, 127, 132	16	21	37	21
12	Improve design of all visualization	110, 126, 129, 131	16	16	21	
13	Final testing	128, 109, 133, 134	21	0	0	
Total			116	101		

#	Size	Category	Short Name	Item Description	Acceptance Criteria
9	4	Cards-Dashboard	Cards-Title	Each card should contain a title that could be text or image, and displayed in upper middle part of the card (break down)	Each card has a title and displayed in correct position
11	2	Cards-Dashboard	Cards-Diagram	Define a default chart to be used for the sales diagram among different options like bar chart, line, pie, etc	A default chart for sales is defined
12	5	Cards-Dashboard	Cards-Diagram	Below the KPI information, each card should display a sales chart. The axes are: x=time separated in quarters, y= sales volume.	Chart is displayed at the bottom of each card
13	5	Cards-Dashboard	Cards-Scrolling	Scrolling on a tablet (with a gesture) to the left or right should move the current set of cards and display a new card keeping the other 2	After scrolling to the left or right, another set of cards is displayed
14	13	Cards-Dashboard	Cards-Compare	As user i can select two or more cards to compare them. The application will ask the user if he/she wants to compare them. If yes the compare screen shows the selected cards. If not, the message disappears	User can change the position of the card correctly use drag and drop
15		General-Background	Visualization-Control	A user can click or touch a button on the top left corner to change the current visualization	user can use the button to change from current visualization to another visualization
16		General-Background	Visualization-Control-Definition	Design the layout of the menu that will show the available visualizations	Visualization menu is designed
17		Cards-Dashboard	KPIs-Control-/Module-Selection	A user can click or touch a button on the KPI that wants to remove from the list. A drop down menu will display the available KPIs for this visualization / module	User can use the button to change from the current KPI to another available KPI, and the related data also changes
18		Cards-Dashboard	KPIs-Control-Drop-Down-Menu	Define a simple drop down menu to display the available KPIs	KPI menu is defined
20		Cards-Dashboard	Year-Control-Button	Define an appropriate position for the year button	Position and style of year button is defined
21	5	Cards-Dashboard	Cards-Scrolling-Gesture	Scrolling on a tablet (with a gesture) to the left or right should move the current set of cards and display a new card keeping the other 2	After scrolling to the left or right, a new card is displayed
22	5	Cards-Dashboard	Cards-Scrolling-Computer	Scrolling on a computer (using arrows) to the left or right should move the current set of cards and display a new card keeping the other 2. The functionality should include two arrows, one on the left side and the other on the right side of the screen for scrolling. The arrows will appear only if the mouse is hovering over the area of the arrow.	After scrolling to the left or right, another set of cards is displayed

#	Size	Category	Short Name	Item Description	Acceptance Criteria
23		Cards-Dashboard	Cards-Compare-Selection	When a user clicks a card, there will be a semitransparent cover over the selected card to show that the user has selected the card to compare it with other/s. If a user clicks the card for the second time, the semitransparent cover disappears.	The semitransparent cover is showed after the card is clicked, and disappears after the second click.
24		Cards-Dashboard	Compare-button	Design the compare button. If the user only selects one card and click the compare button, a message appears that he/she needs to choose 2 or more cards for comparison. If the user chooses two or more cards and click the compare button, the screen will turn to compare mode. If the user selects more than the number of cards that fit the screen, there is a message saying that the number of cards to be compared is to big.	The function of the compare button works as described
25		Cards-Dashboard	Compare-Exit-button	When the user clicks the compare exit button, the compare mode will close and return to the normal mode	compare mode is closed and normal mode is showed after click exit button
26		Cards-Dashboard	KPIs-Control	A user can click or touch a button on the KPI that wants to remove from the list. A menu will display the available KPIs for this visualization.	User can use the button to change from current KPI to another available KPI, and the related data also changes
27		Cards-Dashboard	KPIs-Control-Menu	Define a simple menu to display the available KPIs for the current visualization	KPI menu is defined
34	3	General	Tests	Define a testing framework. Define what components need to be tested and which methodology will be used	Deliver a testing framework
38	8	Cards-Dashboard	Cards-Diagram	Below the KPI information, each card should display a line chart with information from sales. The axes are: x=time (1-year separated in 4 quarters, which means 4 bars), y= sales volume.	Chart is displayed at the bottom of each card
39	3	Cards-Dashboard	Cards-Scrolling-Gesture	Scrolling on a tablet (with a gesture) to the left or right should move the current set of cards and display new cards using the built-in "browser-like" horizontal scrolling. The functionality should move the whole content (cards) of the screen.	After scrolling to the left or right the screen scrolls and new cards are displayed
41	5	Demonstration	HTML-Tests	Define what components need to be tested and which methodology will be used for HTML. Prepare a demonstration of a testing case for HTML	Testing case demonstration performed during the meeting
43	5	Demonstration	Swaping-Tests	Define what components need to be tested and which methodology will be used for Swaping. Prepare a demonstration of a testing case for Swaping.	Testing case demonstration performed during the meeting
45	3	Cards-Dashboard	Compare-Exit	If a user clicks a selected card for the second time, the semitransparent cover on this card disappears. A repetitive unselect action will end the compare mode. If a user clicks outside the area of any card all semitransparent covers disappear and the compare mode is closed.	Compare mode is closed and normal mode is showed after clicking or touching outside a card
54	3	Cards-Dashboard	Dimension-Change-Menu-Button	There is a menu button on the cards current dimension (e.g. competitors, products). After clicking on the title, it will show other dimensions to choose from.	Menu button is put in the right position and after clicking the button, there is a list of dimensions the user can choose from.

#	Size	Category	Short Name	Item Description	Acceptance Criteria
55	5	Cards-Dashboard	Change-Dimension	After choosing another dimension from the menu list, the title of the current cards dashborad changes to the selected dimension. All the data contained in the cards dashboard changes to the corresponding dimension (e.g. from competitor to product).	When choosing another dimension the screen is refreshed with the new data.
56	4	Cards-Dashboard	Cards' Basic-Color	For different dimensions, the basic color of the cards and the background are different (e.g., competitor card: blue; product card: red).	Different basic color of cards are showed in different dimensions.
58	3	Cards-Dashboard	Sort button in all cards-screen	The menu button should be beside the screen title. After click the menu button, it will show the optional dimensions(e.g., region, product category) to choose from.	Optional dimensions list is showed after click the button.
59	5	Cards-Dashboard	Sort menu in all cards-screen	The cards are displayed according to the selection made with the sort by button.	The cards are displayed correctly.
60	1	Homepage	Link to Line-Dashboard	Create a tile for the Line Dashboard and after the user clicks it, the Line Dashboard page is opened	Tile is created and after the user clicks it, the Line Chart-Dashboard is displayed.
61	3	Line-Dashboard	Line-Dashboard-Chart-Display	The basic line chart is displayed in the Line Dashboard-screen. The axes are: x=time (1 year separated in 4 quarters), y= kpi volume.The chart should not cover all screen, there is a list box besides the line chart.	The basic line dashboard is displayed.
62	2	Line-Dashboard	General Setting	Choose the background color, font, font color for the Line-Dashboard and implement it.	General setting are settled.
63	3	Line-Dashboard	Title	Title is in the upper part of the screen (now we use Sales as current title).	Title is displayed.
64	4	Line-Dashboard	Exit Button to Homepage	Display an exit button and after click it, the homepage is displayed.	Button displayed and homepage shows after click the button.
65	8	Line-Dashboard	List	The list shows the products name or competitor name, which has the current KPI.	Products name or competitor name is correctly showed in the list.
68	13	Cards-Dashboard	Arrows to select KPIs	Under the list of 3 KPIs inside a card there are 2 arrows that allow the user to change the current KPI set to a different one. The arrows point to the right and left. Each time a user clicks an arrow a new set of 3 KPIs will appear. The arrows should be cyclical allowing the user to click until he/she finds the starting set.	A new set of 3 KPIs appears on a single card after I have clicked one arrow.
72		Line-Dashboard	Item category-Button	As a user, I should be able to click an item category button on the left upper corner of the screen and after clicking it a list of the available item categories is shown (products or competitors). With this functionality the user can see different items of data to be shown on the line chart.	The category button is put on the top of the list, and it shows the current category. If the category is product, then the list should shows a list of available products. The same function also applied to competitor.
81		Homepage	Link to World-Map-Dashboard	As a user, I can click a tile on the homepage and access the World-Map dashboard, so that I can view the data shown on the World-Map dashboard.	A tile of World Map dashboard is created on the homepage. After user click the tile, World Map dashboard is shown.

#	Size	Category	Short Name	Item Description	Acceptance Criteria
82		World Map Dashboard	General Setting	Background for World Map dashboard should be the same as moving background. The background color and font color match well with each other, so that the user can clearly see the data shown on the dashboard.	Font should remains the same in all dashboards. Font color should be clearly seen on the background color.
83		World Map Dashboard	Title	As a user I can see the title of this dashboard which represents the worldwide information. So that I can have a general idea of this dashboard before I look into the data.	Title is displayed in the upper part of the screen (now we use Customer as current title).
84		World Map Dashboard	Exit Button to Homepage	As a user I can click exit button to return to the homepage. In this case I can select and view other dashboards on the homepage.	Button displayed and homepage shown after click the button. The exit button should display at the same place in all dashboards.
85		World Map Dashboard	World Map	As a user I can see a world map in the dashboard. In this case, user can get the worldwide information in one screen.	World map is in the center right part of the screen. The size of the map is about 50% of the screen. The color of each country will change when the mouse move to that country.
86		World Map Dashboard	Define data structure in JSON for the World Map Chart	Define a data structure for the data input in JSON for the visualization. So the user can see real data.	Data structure is defined in JSON for the World Map dashboard.
92	3	Bubbles Dashboard	Item category Button	As a user, I should be able to click an item category button on the left upper corner of the screen and after clicking it a list of the available item categories is shown (products or competitors). With this functionality the user can see different items of data to be shown on the bubble chart.	The category button is put on the top of the list, and it shows the current category. If the category is product, then the bubble chart shows products as bubbles.
93		Bubbles Dashboard	Define data structure in JSON for the Bubbles Chart	Define a data structure for the data input in JSON for the visualization. So the user can see real data.	Data structure is defined in JSON for the Bubbles dashboard.
103	5	Cards Dashboard	Dimension Change Button	As a user, I can click on a button besides the title to change the current dimension/item category to a different one, so that I have visibility on different dimensions (e.g. from competitors to products).	Two buttons are displayed at each side of the title. After click the right side button, next dimension is displayed. After click the left side button, previous dimension is displayed.
111	8	Cards Dashboard	Testing	As a user, I can go through all the functionalities of the cards dashboard without having any problems, so i can work with the application as expected	The application meets the functional requirements and satisfies the needs of the users
112	8	Line Dashboard	Testing	As a user, I can go through all the functionalities of the line dashboard without having any problems, so i can work with the application as expected	The application meets the functional requirements and satisfies the needs of the users
113	8	Square Dashboard	Testing	As a user, I can go through all the functionalities of the square dashboard without having any problems, so i can work with the application as expected	The application meets the functional requirements and satisfies the needs of the users
121	3	Cards Dashboard	Link between pages	As a user, when I click on a card in the all cards page I can go back from all cards page to main cards page, so I can see the card information	After clicking on a card in the all cards page the main cards page is opened

#	Size	Category	Short Name	Item Description	Acceptance Criteria
125	3	Cards-Dashboard	More-information-Page	As a user, I can see another page when I click on the more-information button. This page contains detailed information of a particular item, so I can have a better idea of the item.	The Page displays a list of 10 to 15 KPIs and a short description of the item
91	8	Bubbles-Dashboard	Bubbles-Chart	As a user I can see a chart with two axes that represent two KPIs. The content of the chart are a group of bubbles that represent the item category selected by the user (product/competitor).	Bubble chart is in the center of the screen. The size of the chart is about 70% of the screen with two axes and the corresponding labels. Each item should have a different color.
118	5	Bubbles-Dashboard	Bubbles-size	As a user, I can see that the size of the bubble represents a third KPI (being the other two the axes), so that I can see on the screen three KPIs with information related to the dimension/item category selected	The bubbles in the chart are displayed in different sizes according to the data that they represent
117	3	Bubbles-Dashboard	Dimension-Change Button	As a user, I can click on a button besides the title to change the current dimension/item category to a different one, so that I have visibility on different dimensions (e.g. from competitors to products).	Two buttons are displayed at each side of the title. After click the right side button, next dimension is displayed. After click the left side button, previous dimension is displayed.
108	5	Bubbles-Dashboard	Bubbles data-binding	As a user, I see on the bubble dashboard data from the JSON files, so i have visibility on real information.	The data displayed on the screen is dynamically binded and represents real data.
114	8	Bubbles-Dashboard	Testing	As a user, I can go through all the functionalities of the dashboard without having any problems, so i can work with the application as expected	The application meets the functional requirements and satisfies the needs of the users
102	4	Square-Dashboard	Color keys	As a user, I can see color keys which show the meanings of different colors, so that I can know what each color represents	The color keys is displayed under the square.
106	5	Square-Dashboard	Time button	The time button is displayed on the Square Dashboard, so that the user is able to know which timeslot the data represent.	The time button displayed on the upper right corner. The smallest unit of the time is a quarter of a year(e.g., Jan.-Mar. 2014)
115	4	Cards-Dashboard	Cards' Basic-Color	As a user, when I can click on the button besides the title to change the current dimension/item category to a different one, I see that the cards and the background change color, so that I can realize on the screen that i have made a change to the visualization	Different color are displayed when a user changes the dimension/item category
31	3	Cards-Dashboard	Compare-button in all-card-screen	Design the compare button. If the user only selects one card and click the compare button, a message appears that he/she needs to choose 2 or more cards for comparison. If the user chooses two or more cards and click the compare button, the screen will turn to compare mode. If the user selects more than the number of cards that fit the screen, there is a message saying that the number of cards to be compared is to big.	The function of the compare button works as described
53	4	Demonstration	Front-End test	Set up an environment for user interface (manual) test. Find a public server for team foundation server. (Ask for advice)	Have an environment ready for testing.
96	8	Line-Dashboard	Item-category-Button	As a user, I should be able to click a button that changes the current dataset for a different one. With this functionality the user can see a new set of data items on the line chart.	The button is on the left top corner. Clicking the button displays the next dataset.

#	Size	Category	Short Name	Item Description	Acceptance Criteria
130	8	Square-Dashboard	Testing	As a user, I go thorough the page of the Square Dashboard seamlessly and i can use all functionalities without any errors. So I have an excellent user experience. For this reason, the Jasmine framework has been chosen and a test suite for the Cards Dashboard is built on several test cases with their corresponding test data.	Execution of test suites doesnt present any errors or bugs and the application and its functionalities perform as defined in previous tasks.

#	Rel.	Size	Category	Short Name	Item Description	Acceptance Criteria	
128	2	8	Cards Dashboard	Testing	As a user, I go thorough the pages of the Cards Dashboard seamlessly and i can use all functionalities without any errors, so I have an excellent user experience. For this reason, the Jasmine framework has been chosen and a test suite for the Cards Dashboard is built on several test cases with their corresponding test data.	Execution of test suites doesnt present any errors or bugs and the application and its functionalities perform as defined in previous tasks.	Andreas
109	2	13	General	Refactoring	The developers restructure the code in order to make it easier to extend and maintain without affecting current functionalities.	The functionalities don't change after the code has been improved	All
133	2	0	General	Refactoring: Departments for Square Dashboard	(This task is part of the Refactoring Epic, task number 109). As a user, i can see that the square dashboard can be used to review data of different departments, so I have a wider view with the same visualization and i can better understand the results of the company. The dashboard should load the correct data when switching departments.	The Square dashboard can be used for finance, marketing and projects.	Nur

#	Rel.	Size	Category	Short Name	Item Description	Acceptance Criteria	
134	2	0	General	Refactoring: Departments for Line Dashboard	(This task is part of the Refactoring Epic, task number 109). As a user, i can see that the line dashboard can be used to review data of different departments, so I have a wider view with the same visualization and i can better understand the results of the company. The dashboard should load the correct data when switching departments.	The Line dashboard can be used for finance, marketing and projects.	Philipp

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
1	1	2	1	1	Application start and close	Application Startup	After user click on the icon of the Application user can see the home page of the application.	Homepage is displayed after clicking the application tile
2	1	2	1	1	Application start and close	Application Shutdown	If user want to close the application, user can close it with a gesture or a button.	Application closes after the button is clicked or the gesture is done
3	1	2	1	1	General Background	Application size	Define a dynamic screen size for both versions of windows, tablet and desktop	After click the app icon, the size of dashboard is displayed correctly on several screen resolutions
4	1	2	1	1	General Background	Background Default Color	Select a default color for the Background	Background shows the selected color
5	1	2	1	1	General Background	Background Default Font and Font Color	Select a default font and default font color for the background	Background shows the selected font
6	1	2	5	8	General	Common HTML/CSS Framework	Evaluate and choose a common framework for mobile devices	Provide Design guideline and HTML framework for designing the app
7	1	3	5	5	Cards Dashboard	Cards Layout Size and Color	Design the layout of the cards page. Several cards should fit on one page and should be easily visible. Decide the size of the card, the cards should be displayed in the middle of the screen leaving a space between each card. Select a color for the cards page	Cards dashboard should be displayed as described. Select a color for the cards page
8	1	3	1	1	Cards Dashboard	Cards Font	Select a font and font color for the cards page	Cards page shows the selected font and font color
32	1	3	5	5	Main Menu	Homepage	Create the main page as a group of tails. Every tail represents a visualization (put a link to the storyboard)	A group of tails is shown on the homepage
33	1	3	1	1	Main Menu	Homepage	Create a link. When the user clicks on the cards tail the applications shows a new page that contains the cards	After clicking the link the cards page opens

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
35	1	3	3	3	General	Architecture	Define control mechanisms (page delegation) and directory structure of the project	Organized project structure
36	1	3	1	1	Cards Dashboard	Cards Title	Each card contains a title in form of a text and is displayed in upper middle part of the card	Each card has a title and displayed in correct position
40	1	3	5	8	Cards Dashboard	Cards Scrolling Computer	Scrolling on a computer (using arrows) to the left or right should move the current set of cards and display new cards using the built-in "browser-like" horizontal scrolling. The functionality should include two arrows, one on the left side and the other on the right side of the screen for scrolling. The arrows will appear only if the mouse is hovering over the area of the arrow.	After scrolling to the left or right the screen scrolls and new cards are displayed
42	1	3	5	5	Demonstration	Javascript Tests	Define what components need to be tested and which methodology will be used for Javascript. Prepare a demonstration of a testing case for Javascript	Testing case demonstration performed during the meeting
10	1	4	1	5	Cards Dashboard	Cards Content	Below the title, each card should contain 3 lines and 2 columns. The first column will display the name of the KPI and the second column the value of the KPI. First KPI value will be a star rating from 1 to 5. Second KPI value will be a % and the third a number.	Cards content is displayed as described
19	1	4	3	3	Cards Dashboard	Year Control	A user can click or touch a button on a predefined position to change the current year.	User can use year button to change from current year to the year user interested in
28	1	4	1	1	Cards Dashboard	Show all cards button	Design a button for summarizing the content of the visualization.	All cards screen shows after click the button

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
47	1	4	5	5	Cards Dashboard	link to compare page	After user click compare button, it will open a sub-page which will be transparent for the user. This means, the subpage has the same dimensions, colors and layout of the previous screen and will display the subgroup of cards selected by the user.	After user click the compare button, subpage displayed
48	1	4	8	8	Cards Dashboard	Cards Diagram	Below the KPI information, each card should display a bar chart with information from sales. The axes are: x=time (1 year separated in 4 quarters, which means 4 bars), y= sales volume.	Chart is displayed at the bottom of each card
49	1	5	5	3	General	Define data structure in JSON	Define a data structure for the data input in JSON for the competitors. It must be extensible to other cards categories, namely products	Data structure is defined in JSON for the competitors dashboard
50	1	5	2	2	General	Define data structure in .csv	Define a product data structure for the data input in .csv.	Clear instructions on how to prepare a .csv file are delivered
51	1	5	2	5	General	Transfer competitor data	Convert data in .csv file to JSON file.	Define a procedure or third party software to do the conversion
52	1	5	13	8	General	Dynamic data input 1/2	Prepare the functions that read the data in JSON	The functions are ready with blank spaces to read data from JSON file
57	1	5	1	1	Cards Dashboard	Exit Button to Homepage	On the cards dashboard, there is an exit button. After clicking the exit button, the homepage is displayed.	Homepage displayed after click the exit button.
69	1	5	2	2	General	Moving Background	The application has a dynamic background that changes colors (yellow/grey).	The colors change after starting the application and keep changing during its use.
70	1	5	1	1	Homepage	Link to Line Dashboard	As a user, I can click a tile on the homepage and access the line dashboard, so that I can view the data shown on the line dashboard.	A tile of line dashboard is created on the homepage. After user click the tile, line chart dashboard is shown.

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
44	1	6	5	5	Cards Dashboard	Cards selection to Compare	When a user clicks a card, there will be a semitransparent cover over the selected card to show that the user has selected the card to compare it with other/s. A message will appear saying: "Select more to compare". The user can select any other cards that are visible and also the ones that are not immediately visible by using the scroll function.	The semitransparent cover is showed after the card is clicked. The message appears after selecting one card. The button appears. The new subpage is exactly the same as the previous one.
46	1	6	3	3	Cards Dashboard	Compare Button	After two or more cards are marked, a button appears saying "compare".	Compare button shows when two or more cards are marked
66	1	6	5	8	General	Dynamic data input 2/2	Use the functions that read the data in JSON.	The functions read the data in JSON file.
71	1	6	8	8	Line Dashboard	Chart Display	A line chart is shown on the right side of the screen of the line dashboard which allows the user to view information on the line chart. The line chart uses at about 70% of the space of the screen and shows the evolution of one KPI along time for different items (products or competitors). The time slots on the horizontal axis are separated by year (and by quarters if possible, depending on the KPI). In this case a user can easily get a general overview of the critical information about chosen combination of KPI and item.	The axes are: x=time in years (1 year separated in 4 quarters if possible, several years of data can be seen on the x-axis, e.g.: Q1 2011 ,Q2 2011, Q3 2011, Q4 2011. 2 of years data means 8 units (if possible). x= kpi value. The chart should not cover all the screen, because there is a list box besides the line chart.

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
73	1	6	5	5	Line Dashboard	List and Lines Display	As a user, i see on the left side of screen and under the item button a rectangular area that contains a list of all available items within an item category (products or competitors instances). Clicking on one item will make appear a line on the line chart on the right with a particular color that represents the selected item. The name of the item on the left will change color and have the same color as the line on the right so the user can identify them easily. Clicking on the line again will make it disappear from the chart and the color on the list will change to standard color again.	The lines appear after clicking on the items on the left and disappear after clicking on them on the right. The color of the item changes and is the same as the color of the line
75	1	6	1	1	Line Dashboard	General Setting	Background for line dashboard should be the same as moving background. The background color and font color match well with each other, so that the user can clearly see the data shown on the dashboard.	Font should remain the same in all dashboards. Font color should be clearly seen on the background color.
76	1	6	1	1	Line Dashboard	Title	As a user I can see the title of this dashboard which represents a KPI. So that I can have a general idea of this dashboard before I look into the data.	Title is displayed in the upper part of the screen (now we use Sales as current title).
78	1	6	1	1	Line Dashboard	Exit Button to Homepage	As a user I can click exit button to return to the homepage. In this case I can select and view other dashboards on the homepage.	Button displayed and homepage shown after click the button. The exit button should display at the same place in all dashboards.
79	1	6	13	8	Cards Dashboard	Merge Cards Comparison functionality	Apply comparison functionality and merge it into the cards page, so user can compare cards on the card dashboard.	All cards functionality can be successfully used in cards dashboard.

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
80	1	6	3	3	Homepage	General Styling	Each tile displayed a picture and description. In this case, user can get main concepts of the dashboard before the user click into the dashboards.	Imagine is displayed above the description.
94	1	6	3	3	Cards Dashboard	Compare Exit	If a user clicks a selected card for the second time, the semitransparent cover on this card disappears and the card is unselected. An exit button will be used to end the compare mode. After clicking on the exit button the compare mode will end	Compare mode is closed and normal mode is showed after clicking the exti button
29	1	7	3	5	Cards Dashboard	All cards screen	All cards screen shows all the available cards. The cards should change size and contain only the logo/title. If all cards dont fit in one screen the user should scroll to see the rest.	All available cards shows on the screen.
87	1	7	3	1	Homepage	Link to Bubbles Dashboard	As a user, I can click a tile on the homepage and access the Bubbles dashboard, so that I can view the data shown on bubbles dashboard.	A tile of bubble dashboard is created on the homepage. After user click the tile, bubble dashboard is shown.
88	1	7	3	1	Bubbles Dashboard	General Setting	Background for bubbles dashboard should be the same as moving background. The background color and font color match well with each other, so that the user can clearly see the data shown on the dashboard.	Font should remains the same in all dashboards. Font color should be clearly seen on the background color.
89	1	7	1	1	Bubbles Dashboard	Title	As a user I can see the title of this dashboard which is: "Explore KPI1_name and KPI2_name". So that I can have a general idea of this dashboard before I look into the data.	Title is displayed in the upper part of the screen.

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
90	1	7	1	1	Bubbles Dashboard	Exit Button to Homepage	As a user I can click exit button to return to the homepage. In this case I can select and view other dashboards on the homepage.	Button displayed and homepage shown after click the button. The exit button should display at the same place in all dashboards.
95	1	7	8	8	Cards Dashboard	Bug Fixing	The cards dashboard contains several errors that need to be resolved	All errors are resolved
74	2	8	3	3	Line Dashboard	Title button	As a user I can click on the title to change the current KPI to a different one to have visibility on different KPIs.	Title changes after clicking on it and selecting a different KPI
98	2	8	1	1	Square Dashboard	General Setting	As a user I can see the title of the dashboard and the exit link with a defined set of colors, font and background, so that I can clearly see the data shown on the dashboard and differentiate it from other dashboards	A title appears in the center of the page. Font remains the same for all dashboards. Font colors can be clearly differentiated from the background color. The exit link appears on top of the screen
99	2	8	1	1	Homepage	Link to Square Dashboard	As a user, I can click a tile on the homepage and access the square dashboard, so that I can view the data shown on square dashboard.	A tile of square dashboard is created on the homepage. After user click the tile, square dashboard is shown.
100	2	8	5	5	Square Dashboard	Generate squares	As a user I see different squares with different sizes and colors. Each color represents a particular category and the size of each square represents the percentage of the KPI value with respect to the total value which always represent 100%.	Different squares with different sizes are displayed on the square dashboard.
104	2	8	5	5	Cards Dashboard	All cards data binding	As a user I see on the all cards screen information from the JSON files. So I have visibility on real data	The data represented on the screen corresponds to the data on the cards dashboard page

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
119	2	8	5	5	Line Dashboard	Bug fixes	Architectural changes and bug fixes related to task number 74 are required to achieve task 74	Task 74 works as specified
30	2	9	3	8	Cards Dashboard	Select cards in all cards screen	When a user clicks a card, there will be a semitransparent cover over the selected card to show that the user has selected the card to compare it with other/s. If a user clicks the card for the second time, the semitransparent cover disappears.	The semitransparent cover is showed after click the card, and disappear after the second click.
37	2	9	1	2	Cards Dashboard	Cards Title	Each card contains a title in form of a logo and is displayed in upper middle part of the card.	Each card has a title and displayed in correct position.
77	2	9	3	3	Line Dashboard	Hovering	As a user, I can hover the mouse (finger) over a line and the system will display the value of the KPI for the current item (product or competitor instance).	Hovering over a line will make appear the value of the KPI for the selected position in the chart.
97	2	9	3	3	Line Dashboard	Define color	As a user, I can see on the line dashboard that the lines have different colors, so that I clearly identify which line represents which item.	Define a color set which can be easily seen on the line dashboard to better distinguish the lines. The color should be generated randomly and clearly be seen on the dashboard.
101	2	9	5	5	Square Dashboard	Arrange squares	As a user, I see different squares in a particular location on the screen, squares dont overlap and together represent one bigger square, so I can see the square dashboard as a whole divided in proportional parts	Different squares with different sizes are displayed on the square dashboard and form a final single square
120	2	9	2	1	Square Dashboard	Generate JSON data	Generate the required data on the JSON file for the Square Dashboard	Test data is seen on the Square Dashboard

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
116	2	10	8	8	Cards Dashboard	Arrows to select KPIs	As a user, I see two arrows (left/right) under the cards in the center of the screen that allow me to change the first three KPIs inside each card, so I can have visibility on more KPIs without changing to other visualization.	A new set of three KPIs appears on each card after the user clicks the left or right arrow
122	2	10	3	2	Line Dashboard	Title	As a user, I see a different title (name of KPI) on the line dashboard whenever i click on the arrow next to it, so I have visibility over a different KPI	A new KPI appears after clicking on arrow next to the KPI name (title)
123	2	10	2	2	Square Dashoard	Color Styling	As a user, I can see different colors on the square Dashboard, so I can differentiate different information.	A set of colors appears on the screen and it help the user to differentiate categories
124	2	10	3	5	Square Dashoard	Square Styling	As a user, I can see squares of an adequate size, so I can clearly see the information inside the squares	Squares should have an appropriate size and very small squares should be ignored or not included in the visualization
67	2	10	5	5	Cards Dashboard	Chart inside a card	Each card contains a bar chart with a title, labels on both axis and values of the bars. The Chart is separated in four quarters for the current year labeled: Q1, Q2, Q3 and Q4. The labels of the quarters shouds be positioned under the bars, the title on top of the chart, the labels for the axis on each corner of the axis and the values of the bars on top of each bar. The title of the chart is the name of the KPI selected.	The chart displays correctly the selected information for the current year with all labels properly visible.
127	2	11	3	8	Cards Dashboard	More information Page	As a user, I can see another page when I click on the more information button. This page contains detailed information of a particular item, so I can have a better idea of the item.	The Page displays a list of KPIs and a short description of the item.

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
107	2	11	5	5	Square Dashboard	Squares data binding	As a user, I see on the square dashboard data from the JSON files, so i have visibility on real information.	The data displayed on the screen is dynamically binded and represents real data.
132	2	11	3	3	Line Dashboard	Preparation for testing	As a user, all bugs are solved before I testing it, in this case testing can be made available.	All bugs in the Line Dashboards are solved
105	2	11	5	5	Square Dashboard	Square Information	The squares show the name of the cost and the amount of the cost. In this case user can realize how much money is spent by whom or which categories or which departments.	The name of the cost is displayed on the upper part of the square and the cost is displayed on the lower right corner.
110	2	12	3	3	General	Design	As a user, I can see an improved graphic interface that is attractive, so I can use the application intuitively and have a great user experience.	The application design is consistent with standard graphical interfaces and the users have a pleasing expeirence when interacting with it
126	2	12	5	5	Square Dashboard	Detail Information	As a user, the detailed information can be seen after I click on the item. The detail information include the name of the subtasks and related costs. So that user can know more detailed information instead of general information.	After click on the item, the page will zoom in, and sub-item with more detailed information is shown. Zoom out can also be done for returning to the homepage of square dashboard.
129	2	12	5	5	Line Dashboard	Testing	As a user, I go thorough the page of the Line Dashboard seamlessly and i can use all functionalities without any errors. So I have an excellent user experience. For this reason, the Jasmine framework has been chosen and a test suite for the Cards Dashboard is built on several test cases with their corresponding test data.	Execution of test suites doesnt present any errors or bugs and the application and its functionalities perform as defined in previous tasks.

#	Rel.	Sprint	Est. Size	Real Size	Category	Short Name	Item Description	Acceptance Criteria
131	2	12	3	3	Square Dashboard	change button	The change button is displayed on the Square Dashboard, so that the user is able to see the data in the square change from the investment to the revenue.	The change button displayed above the square. If the user choose the investment, the investment data will shown in the square, if user choose the revenue, the actual revenue data will shown in the square.

#	Rel.	Sprint	Impediment	Suggestion
1	1	3	Increase communication and more coordination communication	Define a common skype call on tuesday evening
2	2	8	Andreas is sick. It will reduce the velocity	talk with him. when somebody is sick, inform the whole group.
3	2	8	One of the developers is not working anymore in the team, which reduces the velocity	Adjust planning to compensate for reduced velocity.

Sprint	Date From	Date To	Release Manager	Scrum Master
1	09.04.14	17.04.14	Andreas	Andres
2	16.04.14	24.04.14	Nur	Xizi
3	23.04.14	01.05.14	Philipp	Andres
4	30.04.14	08.05.14	Kiran	Xizi
5	07.05.14	15.05.14	Ramni	Andres
6	14.05.14	22.05.14	Andreas	Xizi
7	21.05.14	29.05.14	Philipp	Andres
8	28.05.14	05.06.14	Philipp	Xizi
9	04.06.14	12.06.14	Andreas	Andres
10	11.06.14	19.06.14	Nur	Xizi
11	18.06.14	26.06.14	Philipp	Andres
12	25.06.14	03.07.14	Andreas	Xizi
13	02.07.14	10.07.14	Philipp	Andres