

Plan van aanpak - PROJECT

Johannes Michel
Robbert van Nijnatten
Raymond Rohder
Vincent Stout
Kevin van der Vleuten

25 april 2014

Inhoud

1	Achtergronden	4
1.1	Opdracht	4
1.2	Projectnaam	4
1.3	Opdrachtgever	4
1.4	Organisatie	4
1.5	Stakeholders	5
1.6	Document structuur	5
1.6.1	Units	5
1.6.2	Figures	5
1.6.3	Tables	5
1.6.4	Lists	6
1.7	Reference to bibliography items	6
2	Projectresultaat	7
2.1	Basics	7
2.2	Typesetting content	7
2.2.1	Equations	7
2.2.2	Units	7
2.2.3	Figures	7
2.2.4	Tables	8
2.2.5	Lists	8
2.3	Reference to bibliography items	8
3	Projectactiviteiten	9
3.1	Basics	9
3.2	Typesetting content	9
3.2.1	Equations	9
3.2.2	Units	9
3.2.3	Figures	9
3.2.4	Tables	10
3.2.5	Lists	10
3.3	Reference to bibliography items	10
4	Projectgrenzen	11
4.1	Basics	11
4.2	Typesetting content	11
4.2.1	Equations	11
4.2.2	Units	11

4.2.3	Figures	11
4.2.4	Tables	12
4.2.5	Lists	12
4.3	Reference to bibliography items	12
5	Tussenresultaten	13
5.1	Basics	13
5.2	Typesetting content	13
5.2.1	Equations	13
5.2.2	Units	13
5.2.3	Figures	13
5.2.4	Tables	14
5.2.5	Lists	14
5.3	Reference to bibliography items	14
6	Kwaliteit	15
6.1	Basics	15
6.2	Typesetting content	15
6.2.1	Equations	15
6.2.2	Units	15
6.2.3	Figures	15
6.2.4	Tables	16
6.2.5	Lists	16
6.3	Reference to bibliography items	16
7	Projectorganisatie	17
7.1	Basics	17
7.2	Typesetting content	17
7.2.1	Equations	17
7.2.2	Units	17
7.2.3	Figures	17
7.2.4	Tables	18
7.2.5	Lists	18
7.3	Reference to bibliography items	18
8	Planning	19
8.1	Basics	19
8.2	Typesetting content	19
8.2.1	Equations	19
8.2.2	Units	19
8.2.3	Figures	19
8.2.4	Tables	20
8.2.5	Lists	20
8.3	Reference to bibliography items	20
9	Kosten en baten	21
9.1	Basics	21
9.2	Typesetting content	21
9.2.1	Equations	21
9.2.2	Units	21

9.2.3	Figures	21
9.2.4	Tables	22
9.2.5	Lists	22
9.3	Reference to bibliography items	22
10	Risico's	23
10.1	Basics	23
10.2	Typesetting content	23
10.2.1	Equations	23
10.2.2	Units	23
10.2.3	Figures	23
10.2.4	Tables	24
10.2.5	Lists	24
10.3	Reference to bibliography items	24

Hoofdstuk 1

Achtergronden

1.1 Opdracht

Dit project is een augmented reality project in opdracht van Avans Hogeschool Breda, als onderdeel van de opleiding **Technisch Informatica**. Het project maakt gebruik van OpenCV voor motion detection en OpenGL voor de 3D graphics. Dit project zal computer gegenereerde beelden toevoegen aan reële beelden van de fysieke werkelijkheid. Het project zal worden geprogrammeerd in C en C++.

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

1.2 Projectnaam

Het project is genaamd: "PROJECT"

1.3 Opdrachtgever

Dit schoolproject heeft geen officiële opdrachtgever. De actuele opdrachtgever is dus Avans Hogeschool Breda. De eindbeoordeling zal worden gedaan door de periodecoördinator en andere docenten.

1.4 Organisatie

Het ontwikkelteam bestaat uit 5 Technisch Informatica studenten.

Tabel 1.1: Organisatie

Naam	Rol	Studentnr
Johannes Michel	Gitmaster	2060486
Robbert van Nijnatten	Projectleider	2052820
Raymond Rohder	Projectleider	1115099
Vincent Stout	Secretaris	2066962
Kevin van der Vleuten	Bugtracking	2059022

1.5 Stakeholders

De belanghebbenden van dit project zijn uiteraard de **gebruikers**. Zij leren de wereld en haar monumenten kennen door de applicatie te gebruiken. Daarnaast leren de **studenten** van het ontwikkelteam werken met 3D graphics, motion detection en augmented reality. **Basisscholen** kunnen het eindproduct ook toepassen tijdens topografie lessen.

1.6 Document structuur

Dit document is opgebouwd uit 10 hoofdstukken.

1. Achtergronden
2. Projectresultaat
3. Projectactiviteiten
4. Projectgrenzen
5. Tussenresulten
6. Kwaliteit
7. Projectorganisatie
8. Planning
9. Kosten en baten
10. Risico's

Hoofdstuk 2

Projectresultaat

2.1 Basics

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

2.2 Typesetting content

2.2.1 Equations

An example of an inline equation is: the derivative of x^2 is $2x$. Equation (10.1) shows a display equation:

$$\begin{aligned} y_0 &= \frac{\sqrt{256}}{2} \\ &= 2^3 = 8 \end{aligned} \tag{2.1}$$

2.2.2 Units

An easy way to work with (SI) units: 1 Hz is equal to $2\pi \text{ rad s}^{-1}$.

2.2.3 Figures

Here a figure named *logo.pdf* is inserted¹:



Figuur 2.1: Caption example

¹The *logo.pdf* file is located in the figs folder.

2.2.4 Tables

A table is shown in table 10.1.

Tabel 2.1: Caption example

Name	Grade	Year
John	7.5	2012
Richard	2	2010

2.2.5 Lists

Numbered

Creating a numbered list:

1. First entry
2. Second entry

Descriptive

Creating a descriptive list:

First entry

Second entry

2.3 Reference to bibliography items

First are reference to a website is made [?], then a reference to an article [?] and finally a reference to a book [?].

Good luck!

Hoofdstuk 3

Projectactiviteiten

3.1 Basics

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

3.2 Typesetting content

3.2.1 Equations

An example of an inline equation is: the derivative of x^2 is $2x$. Equation (10.1) shows a display equation:

$$\begin{aligned} y_0 &= \frac{\sqrt{256}}{2} \\ &= 2^3 = 8 \end{aligned} \tag{3.1}$$

3.2.2 Units

An easy way to work with (SI) units: 1 Hz is equal to $2\pi \text{ rad s}^{-1}$.

3.2.3 Figures

Here a figure named *logo.pdf* is inserted¹:



Figuur 3.1: Caption example

¹The *logo.pdf* file is located in the figs folder.

3.2.4 Tables

A table is shown in table 10.1.

Tabel 3.1: Caption example

Name	Grade	Year
John	7.5	2012
Richard	2	2010

3.2.5 Lists

Numbered

Creating a numbered list:

1. First entry
2. Second entry

Descriptive

Creating a descriptive list:

First entry

Second entry

3.3 Reference to bibliography items

First are reference to a website is made [?], then a reference to an article [?] and finally a reference to a book [?].

Good luck!

Hoofdstuk 4

Projectgrenzen

4.1 Basics

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

4.2 Typesetting content

4.2.1 Equations

An example of an inline equation is: the derivative of x^2 is $2x$. Equation (10.1) shows a display equation:

$$\begin{aligned} y_0 &= \frac{\sqrt{256}}{2} \\ &= 2^3 = 8 \end{aligned} \tag{4.1}$$

4.2.2 Units

An easy way to work with (SI) units: 1 Hz is equal to $2\pi \text{ rad s}^{-1}$.

4.2.3 Figures

Here a figure named *logo.pdf* is inserted¹:



Figuur 4.1: Caption example

¹The *logo.pdf* file is located in the *figs* folder.

4.2.4 Tables

A table is shown in table 10.1.

Tabel 4.1: Caption example

Name	Grade	Year
John	7.5	2012
Richard	2	2010

4.2.5 Lists

Numbered

Creating a numbered list:

1. First entry
2. Second entry

Descriptive

Creating a descriptive list:

First entry

Second entry

4.3 Reference to bibliography items

First are reference to a website is made [?], then a reference to an article [?] and finally a reference to a book [?].

Good luck!

Hoofdstuk 5

Tussenresultaten

5.1 Basics

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

5.2 Typesetting content

5.2.1 Equations

An example of an inline equation is: the derivative of x^2 is $2x$. Equation (10.1) shows a display equation:

$$\begin{aligned} y_0 &= \frac{\sqrt{256}}{2} \\ &= 2^3 = 8 \end{aligned} \tag{5.1}$$

5.2.2 Units

An easy way to work with (SI) units: 1 Hz is equal to $2\pi \text{ rad s}^{-1}$.

5.2.3 Figures

Here a figure named *logo.pdf* is inserted¹:



Figuur 5.1: Caption example

¹The *logo.pdf* file is located in the figs folder.

5.2.4 Tables

A table is shown in table 10.1.

Tabel 5.1: Caption example

Name	Grade	Year
John	7.5	2012
Richard	2	2010

5.2.5 Lists

Numbered

Creating a numbered list:

1. First entry
2. Second entry

Descriptive

Creating a descriptive list:

First entry

Second entry

5.3 Reference to bibliography items

First are reference to a website is made [?], then a reference to an article [?] and finally a reference to a book [?].

Good luck!

Hoofdstuk 6

Kwaliteit

6.1 Basics

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

6.2 Typesetting content

6.2.1 Equations

An example of an inline equation is: the derivative of x^2 is $2x$. Equation (10.1) shows a display equation:

$$\begin{aligned} y_0 &= \frac{\sqrt{256}}{2} \\ &= 2^3 = 8 \end{aligned} \tag{6.1}$$

6.2.2 Units

An easy way to work with (SI) units: 1 Hz is equal to $2\pi \text{ rad s}^{-1}$.

6.2.3 Figures

Here a figure named *logo.pdf* is inserted¹:



Figuur 6.1: Caption example

¹The *logo.pdf* file is located in the figs folder.

6.2.4 Tables

A table is shown in table 10.1.

Tabel 6.1: Caption example

Name	Grade	Year
John	7.5	2012
Richard	2	2010

6.2.5 Lists

Numbered

Creating a numbered list:

1. First entry
2. Second entry

Descriptive

Creating a descriptive list:

First entry

Second entry

6.3 Reference to bibliography items

First are reference to a website is made [?], then a reference to an article [?] and finally a reference to a book [?].

Good luck!

Hoofdstuk 7

Projectorganisatie

7.1 Basics

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

7.2 Typesetting content

7.2.1 Equations

An example of an inline equation is: the derivative of x^2 is $2x$. Equation (10.1) shows a display equation:

$$\begin{aligned} y_0 &= \frac{\sqrt{256}}{2} \\ &= 2^3 = 8 \end{aligned} \tag{7.1}$$

7.2.2 Units

An easy way to work with (SI) units: 1 Hz is equal to $2\pi \text{ rad s}^{-1}$.

7.2.3 Figures

Here a figure named *logo.pdf* is inserted¹:



Figuur 7.1: Caption example

¹The *logo.pdf* file is located in the figs folder.

7.2.4 Tables

A table is shown in table 10.1.

Tabel 7.1: Caption example

Name	Grade	Year
John	7.5	2012
Richard	2	2010

7.2.5 Lists

Numbered

Creating a numbered list:

1. First entry
2. Second entry

Descriptive

Creating a descriptive list:

First entry

Second entry

7.3 Reference to bibliography items

First are reference to a website is made [?], then a reference to an article [?] and finally a reference to a book [?].

Good luck!

Hoofdstuk 8

Planning

8.1 Basics

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

8.2 Typesetting content

8.2.1 Equations

An example of an inline equation is: the derivative of x^2 is $2x$. Equation (10.1) shows a display equation:

$$\begin{aligned} y_0 &= \frac{\sqrt{256}}{2} \\ &= 2^3 = 8 \end{aligned} \tag{8.1}$$

8.2.2 Units

An easy way to work with (SI) units: 1 Hz is equal to $2\pi \text{ rad s}^{-1}$.

8.2.3 Figures

Here a figure named *logo.pdf* is inserted¹:



Figuur 8.1: Caption example

¹The *logo.pdf* file is located in the *figs* folder.

8.2.4 Tables

A table is shown in table 10.1.

Tabel 8.1: Caption example

Name	Grade	Year
John	7.5	2012
Richard	2	2010

8.2.5 Lists

Numbered

Creating a numbered list:

1. First entry
2. Second entry

Descriptive

Creating a descriptive list:

First entry

Second entry

8.3 Reference to bibliography items

First are reference to a website is made [?], then a reference to an article [?] and finally a reference to a book [?].

Good luck!

Hoofdstuk 9

Kosten en baten

9.1 Basics

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

9.2 Typesetting content

9.2.1 Equations

An example of an inline equation is: the derivative of x^2 is $2x$. Equation (10.1) shows a display equation:

$$\begin{aligned} y_0 &= \frac{\sqrt{256}}{2} \\ &= 2^3 = 8 \end{aligned} \tag{9.1}$$

9.2.2 Units

An easy way to work with (SI) units: 1 Hz is equal to $2\pi \text{ rad s}^{-1}$.

9.2.3 Figures

Here a figure named *logo.pdf* is inserted¹:



Figuur 9.1: Caption example

¹The *logo.pdf* file is located in the figs folder.

9.2.4 Tables

A table is shown in table 10.1.

Tabel 9.1: Caption example

Name	Grade	Year
John	7.5	2012
Richard	2	2010

9.2.5 Lists

Numbered

Creating a numbered list:

1. First entry
2. Second entry

Descriptive

Creating a descriptive list:

First entry

Second entry

9.3 Reference to bibliography items

First are reference to a website is made [?], then a reference to an article [?] and finally a reference to a book [?].

Good luck!

Hoofdstuk 10

Risico's

10.1 Basics

Text is formatted with: **bold**, *italic* and underline. Section 10.1 is part of chapter 10.

10.2 Typesetting content

10.2.1 Equations

An example of an inline equation is: the derivative of x^2 is $2x$. Equation (10.1) shows a display equation:

$$\begin{aligned} y_0 &= \frac{\sqrt{256}}{2} \\ &= 2^3 = 8 \end{aligned} \tag{10.1}$$

10.2.2 Units

An easy way to work with (SI) units: 1 Hz is equal to $2\pi \text{ rad s}^{-1}$.

10.2.3 Figures

Here a figure named *logo.pdf* is inserted¹:



Figuur 10.1: Caption example

¹The *logo.pdf* file is located in the figs folder.

10.2.4 Tables

A table is shown in table 10.1.

Tabel 10.1: Caption example

Name	Grade	Year
John	7.5	2012
Richard	2	2010

10.2.5 Lists

Numbered

Creating a numbered list:

1. First entry
2. Second entry

Descriptive

Creating a descriptive list:

First entry

Second entry

10.3 Reference to bibliography items

First are reference to a website is made [?], then a reference to an article [?] and finally a reference to a book [?].

Good luck!