

CHALMERS

EXAMINATION / TENTAMEN

Course code/kurskod	Course name/kursnamn		
DIT046	Requirements and User Experience		
Anonymous code Anonym kod		Examination date Tentamensdatum	Number of pages Antal blad
611		13.04.2022	11

* I confirm that I've no mobile or other similar electronic equipment available during the examination.

Jag intygar att jag inte har mobiltelefon eller annan liknande elektronisk utrustning tillgänglig under
examinationen.

No/nr	Solved task Behandlade uppgifter	Points per task Poäng på uppgiften	Observe: Areas with bold contour are to completed by the teacher. Anmärkning: Rutor inom bred kontur ifylls av lärare.
1	X	8	
2	X	14	
3	X	7	
4	X	10	
5	X	6	
6	X	14	
7	X	17	
8	X	84	
9			
10			
11			
12			
13			
14			
15			
16			
17			
Bonus poäng			
Total examination points Summa poäng på tentamen		52	

CHALMERS	Anonymous code Anonym kod DITO46-611	Points for question (to be filled in by teacher) Poäng på uppgiften (ifylls av lärare)	Consecutive page no. Löpande sid nr Question no. Uppgift nr 1
O	1.1) b,c,f	3	
O	1.2) d,e,b	3	
O	1.3) a	1	
O	1.4) e,d,c	1	
O		8	
O			
O			

CHALMERS	Anonymous code	Points for question (to be filled in by teacher)	Consecutive page no. Löpande sid nr
	Anonym kod DIT046-611	Poäng på uppgiften (fylltes av lärare)	Question no. Uppgift nr 2
		$3+6+4+1+0 = 14$	

2.1:

- Brainstorming, where the ideas about the problem are collected (usually as a map, however, other methods can be used).
- If we do nothing, where the situation is analyzed in the absence of a solution to the problem at hand (i.e. the product).
- Assumption busting, where the underlying assumptions about the problem are discussed, amended and possibly removed.
- **3**

2.2:

throwaway prototypes are prototypes that

Web based prototypes are prototypes that can be tested on a variety of different devices, however, they require technical knowledge (code) to implement which can be costly and time consuming. On the other hand paper prototypes (or throwaway prototypes) are prototypes that are temporary proof of concepts and will not make it into the final product. They cheap and fun, however, they can be tedious and unproductive.

6 ½ / 8

2.3:

- Discoverability, it is easy for users to navigate and discover features within the application.
- Affordances, the elements of the design "afford" actions from the user, such as an element that looks clickable "affords" clicking from the user.

4

2.4:

1

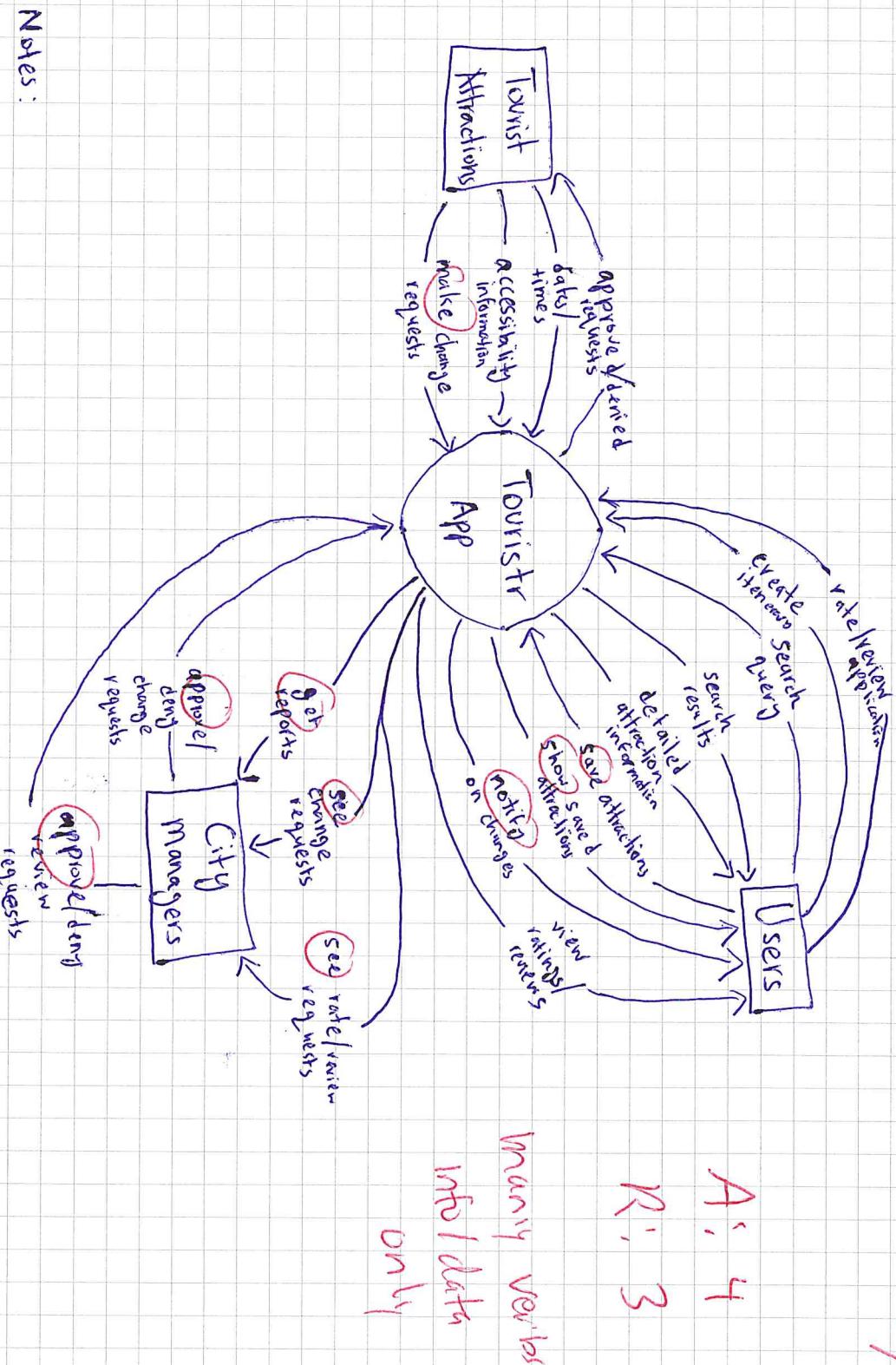
- Bugs in the program causing it to stall or crash
- Broken UI elements, e.g. a button not executing its designated action. *Same as bug*

5

2.5:

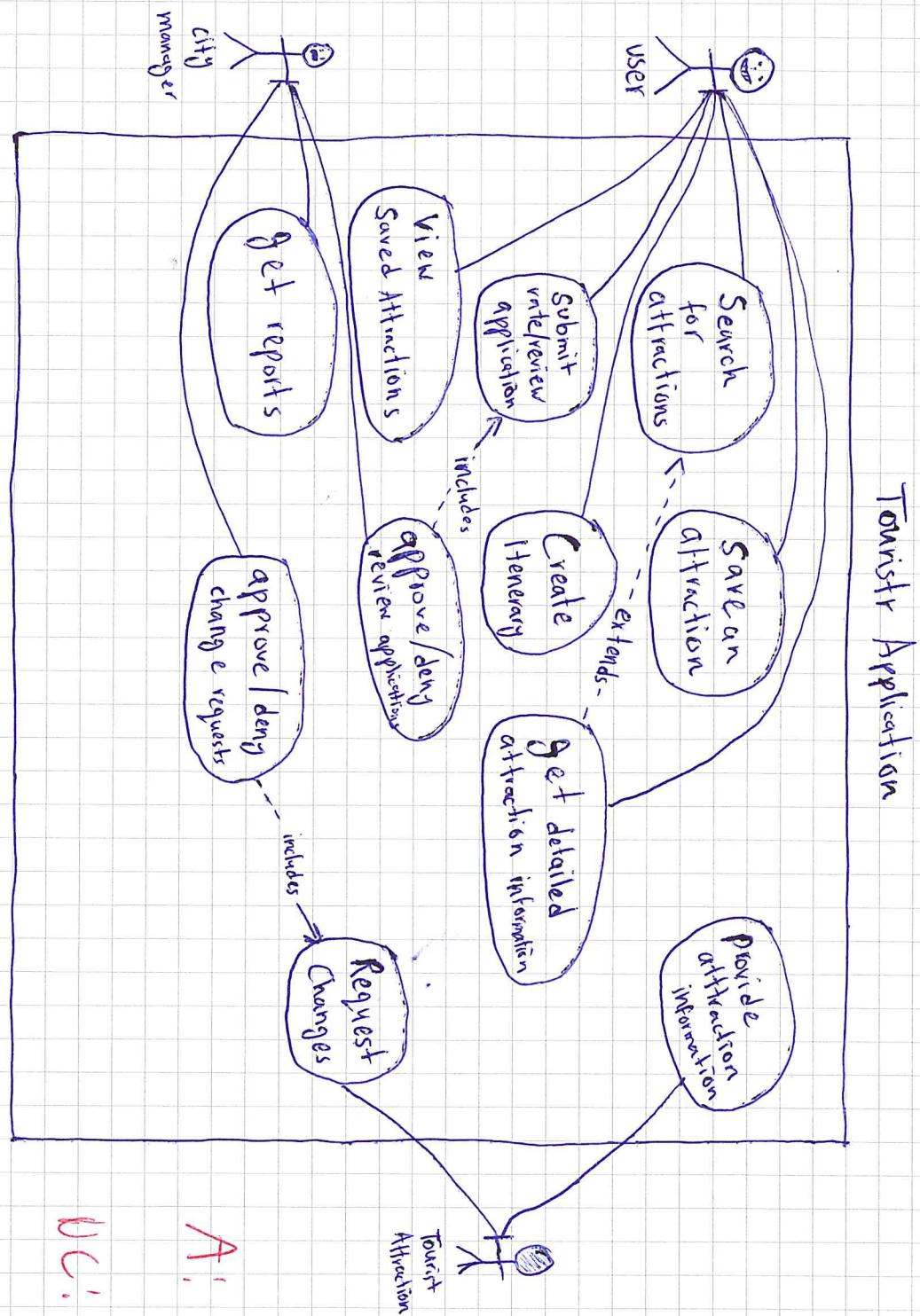
Context Diagram for tourist application (Touristr)

Rotate 90° counter-clockwise



- "detailed attraction information" assumes information such as opening hours, accessibility, prices etc
 - Tourist attractions are assumed to have their own internal system for how and who inputs information into the application. They can be considered as their own company/entity.

Use Case Diagram for tourist application (Touristr)



Use Case: Get Attraction Information |

Goal in context: Get detailed attraction information

Scope: Application / Web application

- Preconditions : - The user has opened the application and is on the home screen
- The user knows the name of the attraction they are looking to find.
 - The desired attraction

Success End Condition : The user successfully finds the desired attraction, and the detailed information

Failed End Condition : The attraction is not found.

Primary Actor : User

design

|

Trigger: User clicks the search input box

MAIN SUCCESS SCENARIO

1. User clicks searchbox
2. Type in the attraction name and search
3. Find desired attraction from results and select it
4. Read detailed information *on what?*

2

EXTENSIONS

2. User only types the first few letters and finds the attraction in autocomplete list.
1. The attraction is displayed on the home page's explore section so user clicks there instead.

2

SUB-VARIATIONS

2. User cancels the search
3. Desired attraction is not present in the results.

2

CHALMERS	Anonymous code Anonym kod DITO46-611	Points for question (to be filled in by teacher) Poäng på uppgiften (fylltes av lärare)	Consecutive page no. Löpande sid nr Question no. Uppgift nr
			7 6
Textual Requirements.		14	
1. The system shall allow users to search through the list of available tourist attractions. (Functional)			1
2. The system shall return the results of search queries within five seconds, provided that the application is in online mode. (Non-functional)			1
3. The system shall store user schedules in a secure manner so that user privacy is not compromised. (Non-functional)			1
4. The system shall allow tourist attractions to keep their information up to date by submitting change requests. (functional)			1
5. The system shall allow city managers to approve/deny change requests for tourist attractions. (functional)			1
6. The system shall allow city managers to approve/deny reviews submitted by users on tourist attractions. (functional)			1
7. The system shall contain a phone application as well a web application. (constraint)			1
8. The system shall be compatible with all Android/Apple phones released within the last 5 years. (constraint)			1
Domain Assumptions:			
- The system XYZ requires GDPR com implementation			1

Textual Requirements User stories

5

#1 As a user, I want to be able to add reviews to attractions so that I can express my opinion on the visited attractions.

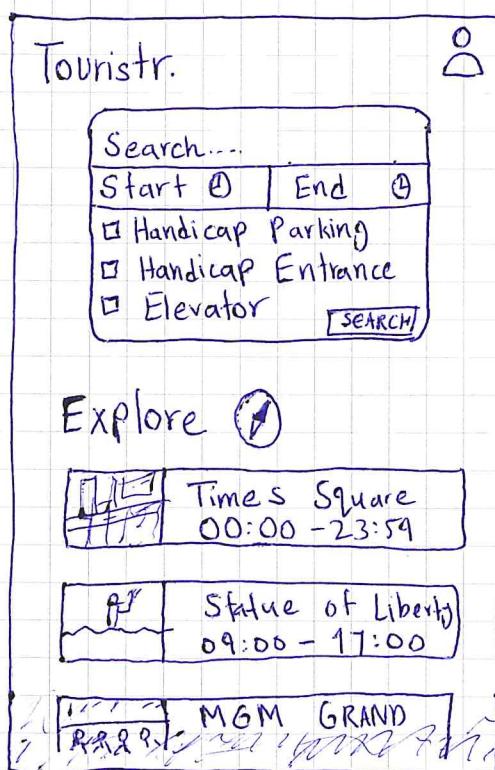
#2 As a user, I want to be able to read the ratings/reviews submitted by other users so that I can make an ~~educated~~ ^{informed} decision on visiting the attraction.

#3 As a user, I want to receive a notification when changes are made to one of my saved attractions, so that I can update my plans accordingly.

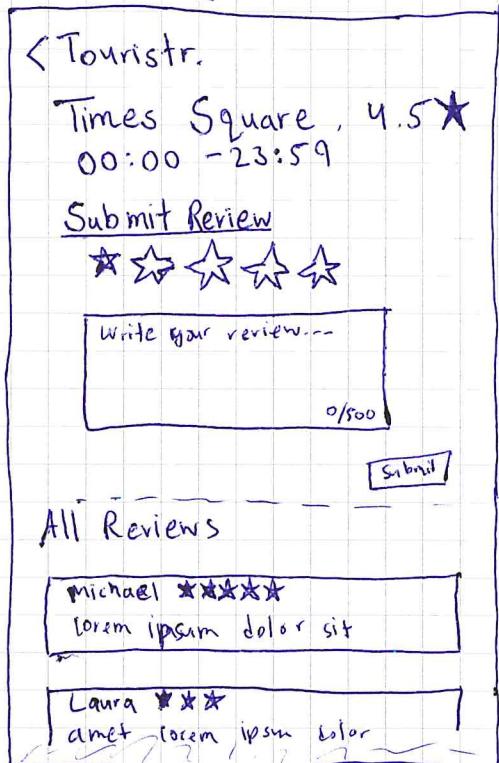
#4 As a user, I want to be able to filter my search query results based on availability of dates, times, as well as accessibility information such as availability of elevators, handicap friendly entrances etc, so that I can plan accordingly.

#5 As a user I want to create a schedule for my visit, which would include the time and date of my visit to a particular attraction, so that I do not miss out on any desired attractions.

Screen 1



Screen 2



Screen 1:

- The system shall allow users to search through the list of available tourist attractions.
- As a user, I want to be able to filter my search query results based on availability of dates, times, as well as accessibility information such as availability of elevator, handicap friendly entrances, so that I can plan accordingly.

Patterns Used:

Where? I see a hint not a prompt

- Input prompt, in order to clarify to the user what the application expects from them.
- checkboxes, ~~in order~~ to allow the user the choice of picking and choosing the accessibility features important to them.

not a pattern

⑥ 7 continues →

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	DIT046-611		10 7

Screen 2 :

- 4
- As a user I want to be able to add reviews to attractions so that I can express my opinion on visited attractions.
 - As a user I want to be able to read the ratings/reviews submitted by other users so that I can make an informed decision on visiting the attraction.

Patterns used:

- 2 Cards - in order to present the reviews in a visually appealing manner.
- 2 Infinite list - to allow the user to read all the reviews they require in a seamless manner.

CHALMERS	Anonymous code Anonym kod DITOY6-611	Points for question (to be filled in by teacher) Poäng på uppgiften (fyller av lärare)	Consecutive page no. Löpande sid nr Question no. Uppgift nr 8
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Test 1) You are scheduling a trip for your grandmother who cannot use the stairs due to her old age. How will find suitable attractions for her?

~~Answer: Use the elevator checkmark to filter.~~ *on which screen?*
~~Test 2:~~ *don't need*

Test 2: You want to visit Times Square but are unsure about whether or not you will enjoy yourself. How will you alleviate these concerns?

Answer: Read other people's reviews.

Test 3: You had a great time at Times Square and now you want to document your experience for future visitors. How will you achieve this?

Answer: Leave a review.

Test 4: You will be in XXZ for one day, you want to check which attractions will be available on that day how will you do this?

Answer: Use the start and end in the search.

Test 5: It is 18:00 and you are wondering if you can still make it to the statue of liberty. How will you find this information?

Answer: Use the search and look at the hours.

3 3 4

which screens? need one for each screen.