Designing Interactive Systems I

Lab 2: Gestalt Laws, Information Content, Visibility, Affordances, and Signifiers

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https://hci.rwth-aachen.de/dis

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Assignment 1: Fitts' Law

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Left edge of the screen

a = 0 ms and b = 100 ms/bit.

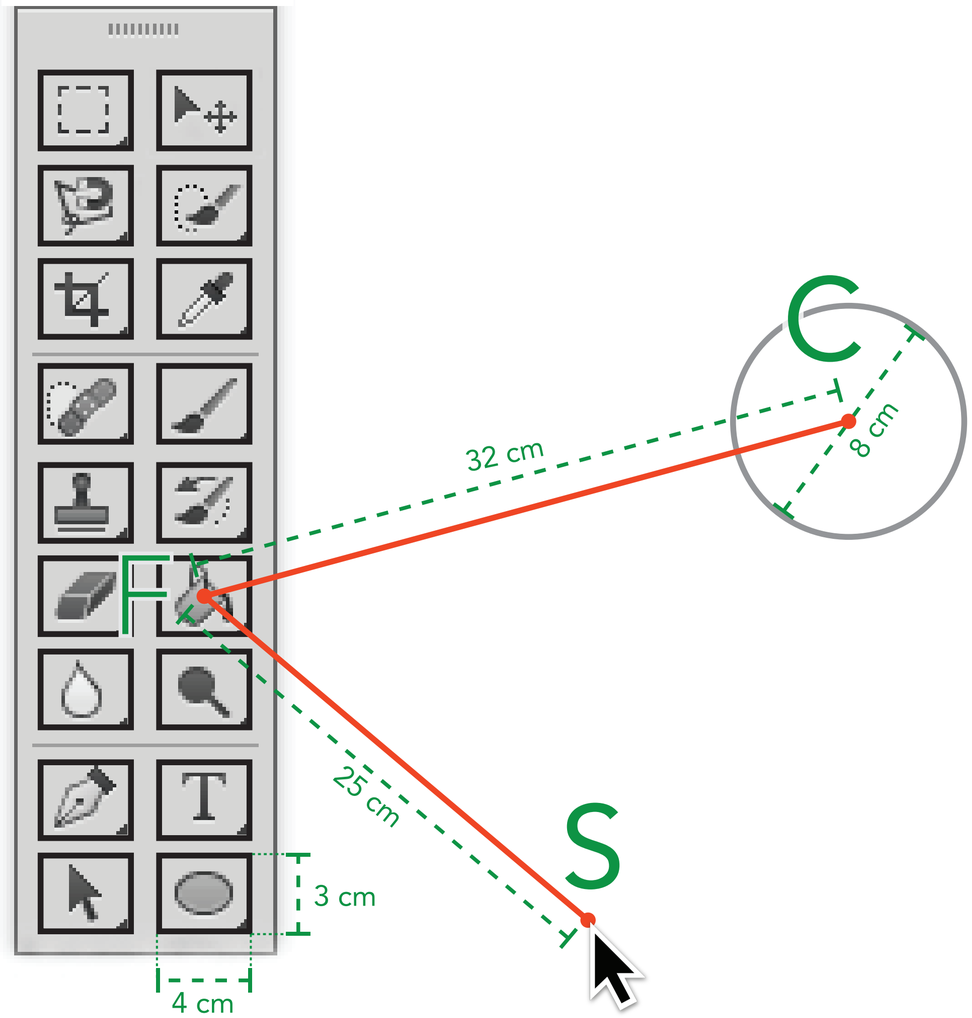

Figure 1: UI of Adobe Photoshop. The user's task

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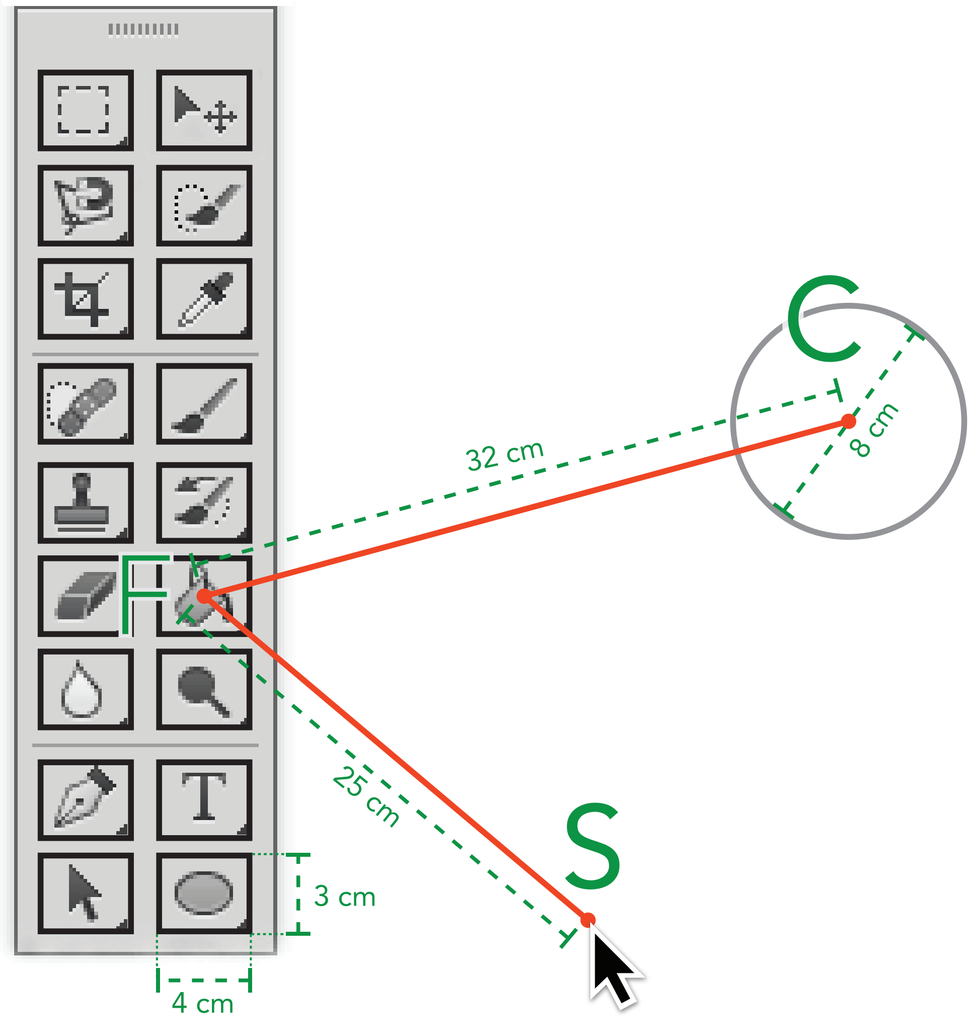
Left edge of the screen

If the user uses her fingers instead of a mouse, the device parameters change to a = 100 ms and b = 50 ms/bit. Does the movement time increase or decrease as a result of this? Hint: You don't need to compute the exact movement time.



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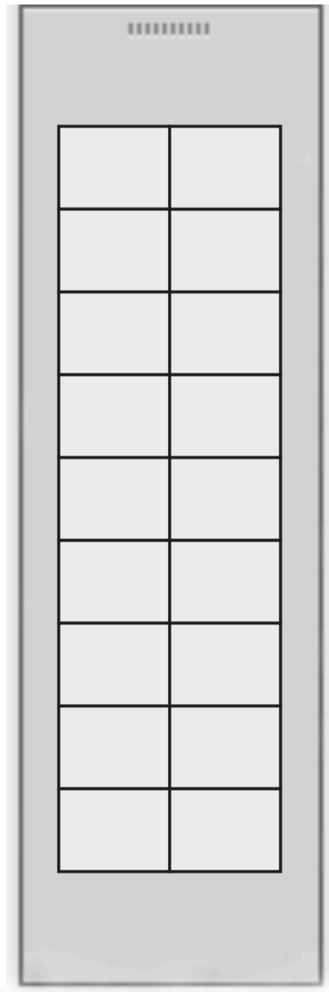

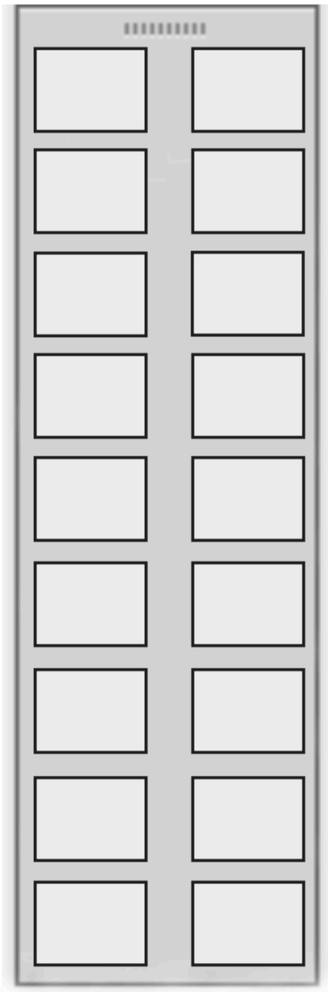

Oliver's Design **Marcel's Design**

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Search

Music

Library For You Browse Radio Store

Library
- Recently Added
- Artists
- Albums
- Songs
- Genres
- Music Videos
- Downloaded

Apple Music Playlists
- A.R. Rahman Essentials
- Alia Bhatt Essentials
- Animationsfilme
- Beethoven and the Roma...
- Best of 90s Tamil
- Best of the Week
- Brain Work: Classical Mus...
- Colbie Caillat Essentials
- Coldplay Essentials
- Contemporary Classical P...
- Der Soundtrack zur TV S...
- Felix Jaehn Essentials
- Hans Zimmer - His Great...
- Hans Zimmer: Next Steps
- Harris Jayaraj Essentials (...
- Harry Gregson-Williams E...
- Ilaiyaraaja Essentials
- Lazy Morning
- Magical Soundtracks
- Oscar Gewinner: Beste Fil...
- Passenger Essentials
- Rajinikanth Essentials
- Romantic day out at the B...
- Running to the Beats
- Sara Bareilles Essentials
- Sing Me to Sleep
- The A-List: Classical
- The Wachowskis
- Top Songs of 2016
- Video Games
- Vijay Essentials
- Workout with Tamil

Music Playlists

The Da Vinci Code
Hans Zimmer

The Dark Knight Rises
Hans Zimmer

The Dark Knight Ris...
Hans Zimmer

The Dark Knight Ris...
Hans Zimmer

Inception - Soundtr...
Hans Zimmer

Inferno (Original Mo...
Hans Zimmer

Batman Begins
Hans Zimmer and Ja...

The Dark Knight
Hans Zimmer and Ja...

Aadhavan
Harris Jayaraj

The Da Vinci Code

Hans Zimmer

Soundtrack • 2006

14 songs, 1 hour, 8 minutes Shuffle

♥ 1	Dies Mercurii I Martius	Hans Zimmer & Richard Harvey	6:03	8	Daniel's 9th Cipher	Hans Zimmer & Richard Harvey	9:31
2	L'esprit des Gabriel	Hans Zimmer & Richard Harvey	2:49	9	Poisoned Chalice	Hans Zimmer & Richard Harvey	6:20
3	The Paschal Spiral	Hans Zimmer & Richard Harvey	2:49	10	The Citrine Cross	Hans Zimmer & Richard Harvey	5:22
4	Fructus Gravis	Hans Zimmer & Richard Harvey	2:50	11	Rose of Arimathea	Hans Zimmer & Richard Harvey	8:12
5	Ad Arcana	Hans Zimmer & Richard Harvey	6:07	12	Beneath Alrischa	Hans Zimmer & Richard Harvey	4:23
6	Malleus Maleficarum	Hans Zimmer & Richard Harvey	2:19	13	Chevaliers de Sangreal	Hans Zimmer & Richard Harvey	4:07
7	Salvete Virgines	Hans Zimmer & Richard Harvey	3:14	14	Kyrie for the Magdalene	Various Artists & Richard Harvey	3:55

Aadhavan (Original...
Harris Jayaraj

Anegan (Original M...
Harris Jayaraj

Ayan
Harris Jayaraj

Bheema
Harris Jayaraj

Chellamae
Harris Jayaraj

Dhaam Dhoom
Harris Jayaraj

Endrendrum Harris
Harris Jayaraj

Iru Mugan (Original...
Harris Jayaraj

Kaakha Kaakha
Harris Jayaraj

GETTING STARTED
TUTORIAL
1. Introduction
2. The Hero Editor
3. Master/Detail
4. Multiple Components
5. Services
6. Routing
7. HTTP
FUNDAMENTALS
Architecture
Template & Data Binding
Forms
User Input
Template-driven Forms
Form Validation
Reactive Forms
Dynamic forms
Bootstrapping
NgModules
NgModules
NgModule FAQs
Dependency Injection

Template-driven validation

To add validation to a template-driven form, you add the same validation attributes as you would with native HTML form validation. Angular uses directives to match these attributes with validator functions in the framework.

Every time the value of a form control changes, Angular runs validation and generates either a list of validation errors, which results in an INVALID status, or null, which results in a VALID status.

You can then inspect the control's state by exporting `ngModel` to a local template variable. The following example exports `NgModel` into a variable called `name` :

template/hero-form-template.component.html (name)

```
<input id="name" name="name" class="form-control"
       required minlength="4" forbiddenName="bob"
       [(ngModel)]="hero.name" #name="ngModel" >

<div *ngIf="name.invalid && (name.dirty || name.touched)"
     class="alert alert-danger">

  <div *ngIf="name.errors.required">
    Name is required.
  </div>
  <div *ngIf="name.errors.minlength">
    Name must be at least 4 characters long.
  </div>
  <div *ngIf="name.errors.forbiddenName">
    Name cannot be Bob.
  </div>

</div>
```

Form Validation
Template-driven validation
Reactive form validation
Validator functions
Built-in validators
Custom validators
Adding to reactive forms
Adding to template-driven forms
Control status CSS classes

Headphones
Speakers
more...

Gift Cards

Apple Store Gift Cards
iTunes Gift Cards
Redeem Gift Card

Special Deals

Refurbished Mac
Refurbished iPod
Refurbished iPad
Clearance

SAVE

Refurbished iPad

Full 1-year warranty

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Refurbished 8GB iPod touch

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In-Class Exercise 2: Affordances vs. Signifiers

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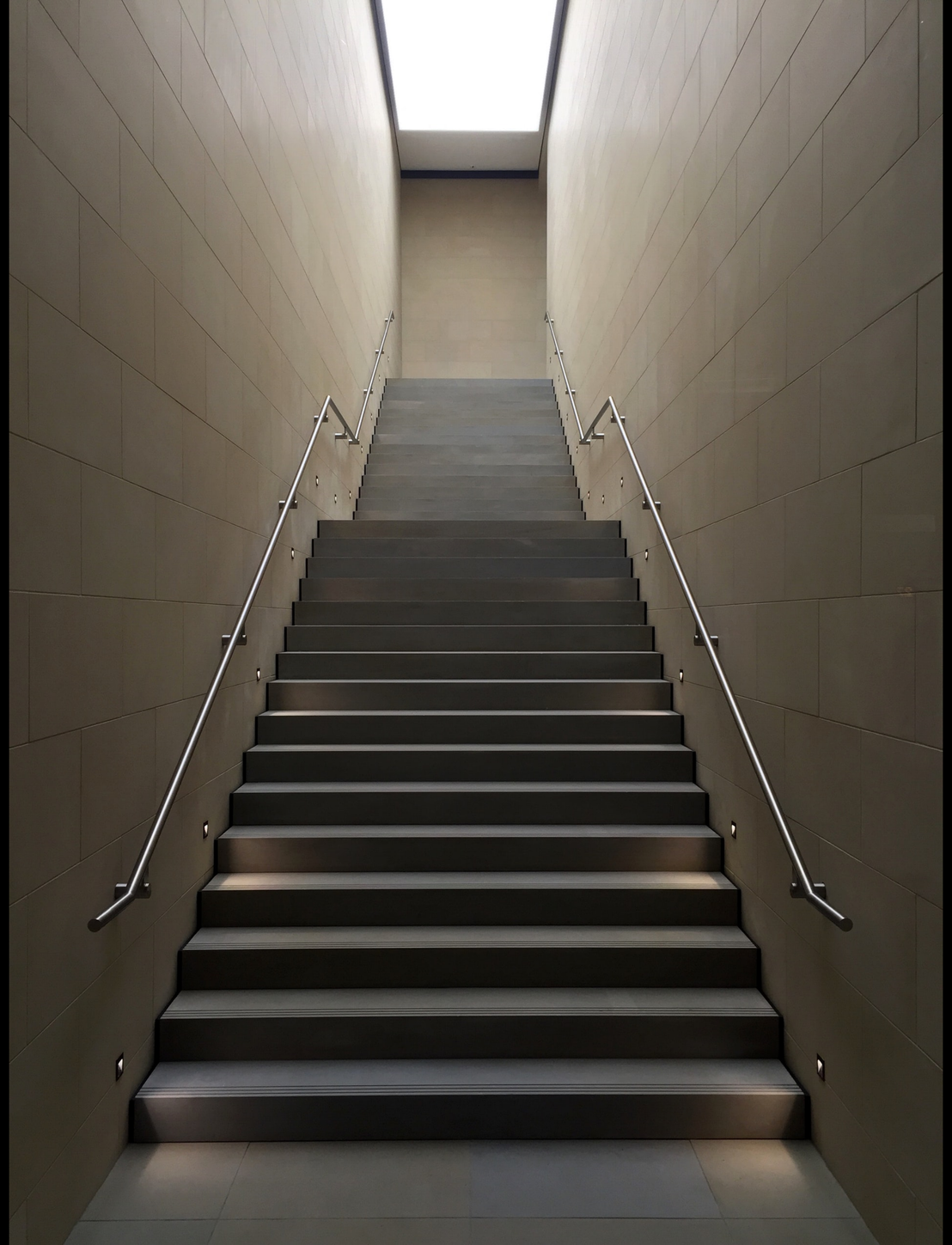

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