

## Welcome:

Welcome to your IT career entry at Christoph Backhaus IT! We are excited to accompany you on your journey into the world of application development. In the coming weeks, you will be thoroughly prepared for the application process and the practical requirements that await you after your time with us. Our goal is not only to provide you with technical knowledge but also to equip you with essential organizational and professional skills that will be crucial for your future career.

## Part 1: Organizational Basics and Application Process

In this first section, we lay the foundation for your IT career. The focus is on organizational and professional skills that will help you optimally prepare for the application process after your internship. The course is deliberately designed to be asynchronous, providing you with maximum flexibility. Visual diagrams with main sections and different paths depending on knowledge level and preferences allow you to develop individually. A skill board helps you expand and deepen your abilities.

### Topics:

#### 1. Gather.town & Virtual Collaboration

- Introduction to the use of our online video platform Gather.town.
- **Creating Your Own Virtual Room:** Each intern creates their own private room in Gather.town for use in group work and meetings.
- **Permanent Room Link:** Create a permanent link to your room to be used in your calendar for video meetings.
- **Group Work:** Use these private rooms for collaboration in Part 2. Teams meet in the team leader's room and can invite each other using the calendar function from Meetergo.
- **Tip:** Set up whiteboards in your room where you can note the links to the rooms of other team members, making it easy to switch between rooms.

#### 2. GitHub

- Create an account, create a repository, fork a repository, create a branch, manage GitHub Issues.

#### 3. Online Calendar

- Create and use appointment links to efficiently coordinate meetings and group work.

#### 4. LinkedIn Profile

- Create and optimize, send network requests.

## **Recommended GitHub Repositories:**

1. **Basics Repository** ([github.com/NADOOIT/NADOO-GitHub-Basics](https://github.com/NADOOIT/NADOO-GitHub-Basics) )
  - Here you will document your first steps in setting up a GitHub account and managing repositories.
2. **Application Process Repository** ([github.com/NADOOIT/NADOO-Bewerbungsprozess](https://github.com/NADOOIT/NADOO-Bewerbungsprozess) )
  - In this repository, you collect your notes and progress on topics such as LinkedIn and online calendars.
3. **Gather.town and Virtual Collaboration Repository** ([github.com/NADOOIT/NADOO-RemoteSetup](https://github.com/NADOOIT/NADOO-RemoteSetup))
  - A guide to using Gather.town, reserving a desk, as well as tips for effective communication and collaboration in the virtual space.

**Location:** Training Room 1

{{ Link to the Gather Room }}

**Time Frame:** Maximum 2 days

### **Recommendation:**

Take the time to thoroughly work through the topics, and don't hesitate to ask questions or seek support. The notes in the GitHub repositories are publicly accessible, so you can always refer back to and expand on them.

### **Division of Work:**

Each intern works on the topics independently, supported by the provided materials and instructions.

### **Roles:**

The role of "Team Member" is the focus here. Exchange of experiences and solutions is a central part of this section.

### **When Finished:**

Once you have completed this section, you will seamlessly move on to the next part of the course, where we dive deeper into technical topics.

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This process ensures that participants first set up the virtual work environment and learn how to use it for collaboration. This way, Gather.town is effectively integrated as a foundation for the subsequent steps and group work.

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## Second Stage

### Welcome:

Welcome to the next stage of your IT internship at Christoph Backhaus IT! In the coming days, you will delve deeply into application development. Our goal is not only to equip you with the technical skills needed for your IT career but also to provide you with the practical know-how essential in the workplace.

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### Part 2: Programming Practice and Teamwork

In this section, we will enhance your programming knowledge through hands-on tasks. You will learn how to develop software collaboratively within a team and gain initial insights into agile working principles. Through pair programming and regular team meetings, we will strengthen not only your technical abilities but also your communication and collaboration skills.

#### Topics:

- **GitHub Desktop:** Using the tool for local repository management and synchronization with GitHub.
- **NADOO-Teach:** Introduction to the framework and its applications.
- **Briefcase & Toga:** Tools for creating cross-platform Python applications.
- **NADOO Time Clock:** Developing a functional time-tracking application as a practical project.

#### Location:

The training takes place in Training Room 1. You can access the virtual training room via this link: {{ Link to the Gather Room }}

#### Time Frame:

3 days

#### The task is complete when:

The completion of the Time Clock application will be confirmed by someone who has prior experience with similar projects. If no one is available, immediately book a 15-minute meeting with Christoph Backhaus using this link: [my.meetergo.com/christop.backhaus.it/erstgesprach](https://my.meetergo.com/christop.backhaus.it/erstgesprach).

#### Recommendation:

Download the Toga documentation as a PDF for permanent access. This will also be needed for future AI-based developments.

**Division of Work:**

Tasks will be completed in groups of 1-2 people. Working alone is only permitted if no other participants are in the same phase. If possible, join other teams. Teams should consist of four people.

Programming will be done in pair programming. One person codes while the other watches, asks questions, and provides input. All questions and answers must be documented. Ideally, coding sessions should also be recorded for later analysis.

Only when all groups have completed the main task should participants focus on individual or team projects.

**Roles:**

One group member will be randomly selected as the team leader. This person is responsible for organizing regular team meetings and facilitating discussions on progress, problems, and ideas.

**When finished:**

If the week is not yet over, use the remaining time to experiment. Develop a new feature or a project that interests you. Find out which projects already exist from others, and check out our GitHub project list: [github.com/orgs/NADOOIT/repositories](https://github.com/orgs/NADOOIT/repositories).

If you wish to continue working on the NADOO Time Clock, you can either extend the existing project or develop a new feature independently.

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This section will not only enhance your technical skills but also foster teamwork and problem-solving in a collaborative environment. Use this time to dive deep into development and refine your skills.

**Topics:**

- GitHub Desktop -> NADOO-Teach
- Briefcase -> Toga
- Time Clock (Stempeluhr)

**Location:**

The training takes place in Training Room 1.

{{ Link to the Gather Room }}

**Time Frame:**

3 days

**The task is complete when:**

The completion of the Time Clock is confirmed by someone who has already validated it as finished.

If no one is available, immediately book a 15-minute meeting with Christoph Backhaus ([my.meetecho.com/christop.backhaus.it/erstgesprach](https://my.meetecho.com/christop.backhaus.it/erstgesprach)).

**Recommendation:**

Download the Toga documentation as a PDF (instructions). This ensures you have permanent access, and it will be needed later for AI development.

**Division of Work:**

Tasks are to be completed in 1-2 person groups. A single person is only allowed if no one else is in this phase.

Join other teams if possible. Teams consist of 4 people.

Programming is done using pair programming, where one person codes while the other observes and asks questions.

All questions and corresponding answers must be documented. Ideally, coding sessions should also be recorded.

Only when everyone is finished should members divide into two different directions.

**Roles:**

One member should be randomly selected as the team leader. This person will schedule regular team meetings and discussions on progress, problems, and ideas.

**When finished:**

If the week is not yet over, the remaining time should be used for experimentation.

You should either develop a new feature or work on a project that interests you. Find out what projects already exist and check out our GitHub project list:

[github.com/orgs/NADOOIT/repositories](https://github.com/orgs/NADOOIT/repositories)

If you want to continue working on the NADOO Time Clock, you have the option to review the project beforehand or develop a feature blindly—this is up to you.