HTW**D**

Hochschule für Technik und
Wirtschaft Dresden
University of Applied Sciences

Menschenzentrierte Digitale Verwaltung

Entwicklung eines Prototypen zur Unterstützung ausländischer Studierender in Deutschland

Autor:	Alexander Schulz[1]
Matrikelnummer:	55297
Studiengang:	Angewandte Informatik
Betreuer:	Prof. Dr.-Ing. habil. Jürgen Anke[2], M.Sc. Anna-Magdalena Krauß[3]

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[1]alexander.schulz2@stud.htw-dresden.de
[2]juergen.anke@htw-dresden.de
[3]anna-magdalena.krauss@htw-dresden.de

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1 Einleitung

Hintergrund und Motivation

Pro Semester studieren über 400.000 ausländische Studierende an deutschen Hochschulen [1]. Die Attraktivität Deutschlands als Studienstandort liegt vor allem in der hohen Qualität der Ausbildung, einer breiten Auswahl an Studiengängen sowie der internationalen Anerkennung [2], [3]. Dennoch sehen sich viele Austauschstudierende mit erheblichen bürokratischen Hürden konfrontiert, die sie von ihrem eigentlichen Ziel – der akademischen Ausbildung – ablenken. Fehler oder Verzögerungen in administrativen Prozessen können den Studienstart erheblich beeinträchtigen und stellen eine zusätzliche Belastung dar [2], [3].

Problemstellung

Die bürokratischen Prozesse in Deutschland sind für viele ausländische Studierende schwer verständlich und oftmals nicht rechtzeitig zu bewältigen. Probleme wie fehlende Transparenz bei Antragsverfahren, das Einhalten von Fristen oder die Organisation von Unterkünften führen häufig zu Frustration, Stress und Verzögerungen. Ohne angemessene Unterstützung bleibt für die Studierenden weniger Zeit, sich auf ihr Studium zu konzentrieren.

Zielsetzung

Ziel der Arbeit ist die Entwicklung eines Prototyps, der ausländische Studierende bei bürokratischen Prozessen unterstützt. Der Prototyp soll individuelle Bedürfnisse berücksichtigen und mit hilfreichen Funktionen den Studierenden dabei helfen, die administrativen Anforderungen effizient und rechtzeitig zu bewältigen. Eine Veränderung oder Optimierung der Prozesse selbst, liegt nicht im Rahmen dieser Arbeit.

Forschungsfrage

„Welche funktionalen Anforderungen sollte ein Prototyp erfüllen, um ausländische Studierende bei der Bewältigung bürokratischer Prozesse in Deutschland zu unterstützen?"

Vorgehensweise

Im Rahmen der Arbeit wird die Methode des Human-Centered Design angewandt, um die Perspektiven und Bedürfnisse der Zielgruppe in den Mittelpunkt zu stellen. Dadurch soll ein praxisnaher und bedarfsgerechter Prototyp entwickelt werden. Dieser Ansatz gewährleistet, dass die erarbeiteten Lösungen den realen Anforderungen der Studierenden gerecht werden und ihnen die bürokratischen Abläufe erleichtern.

2   Methode des Human-Centered Design

Human-Centered Design (HCD) ist ein nutzerzentrierter Ansatz, der den Menschen und seine Bedürfnisse in den Mittelpunkt stellt. Ziel ist es, benutzerfreundliche Lösungen zu schaffen, die effizient und effektiv sind. HCD basiert auf den Prinzipien [4]:

- **Fokus auf Menschen:** Nutzerbedürfnisse stehen im Vordergrund.
- **Partizipation:** Nutzer:innen sind aktiv am Designprozess beteiligt.
- **Iterativer Ansatz:** Entwicklung in Zyklen.
- **Kontext:** Soziale, kulturelle und technische Faktoren werden berücksichtigt.

HCD-Prozess Der HCD-Prozess ist iterativ und umfasst folgende Phasen [4]:

- **Planung:** Definition von Zielen und Einbindung der Stakeholder.
- **Analyse des Nutzungskontexts:** Untersuchung von Aufgaben, Umgebung und Zielen der Nutzer.
- **Ermittlung der Nutzerbedürfnisse:** Interviews, Beobachtungen und Workshops zur Identifikation von Anforderungen.
- **Entwicklung von Prototypen:** Gestaltung und Testen von Designlösungen in Low-

[4] und High-Fidelity[5].

- **Evaluierung:** Nutzerfeedback und Usability-Tests zur Optimierung der Lösung.

Ein zentraler Aspekt des HCD-Prozesses ist die systematische Darstellung der Nutzer und ihrer Anforderungen, um Designentscheidungen zu unterstützen. Hier kommen Werkzeuge wie zum Beispiel Personas, Benutzergruppenprofile und User Journey Maps zum Einsatz:

- **Personas:** Personas sind fiktive, datenbasierte Profile typischer Nutzer, die die wichtigsten Merkmale, Bedürfnisse und Ziele der Zielgruppe repräsentieren. Sie helfen, ein klares Bild der Zielgruppe zu entwickeln und unterstützen Designer dabei, nutzerzentrierte Lösungen zu gestalten.
- **Benutzergruppenprofile:** Diese Profile beschreiben spezifische Gruppen von Nutzern, die ähnliche Verhaltensmuster, Ziele und Herausforderungen teilen. Sie ergänzen Per-

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[4]Low-Fidelity bedeutet, dass der Prototyp nur ein Minimum an visuellen Details und Funktionalität aufweist, aber genug Inhalt hat, um das Konzept mit anderen zu teilen.
[5]High-Fidelity ist eine detaillierte Darstellung eines Produkts, die in Funktion, Aussehen, Verhalten oder Bewegung dem geplanten Endprodukt so nahe wie möglich kommt.

sonas, indem sie breitere Trends und Gemeinsamkeiten zwischen den Nutzern aufzeigen und so die Segmentierung und Priorisierung der Anforderungen erleichtern.

- **User Journey Maps:** User Journey Maps visualisieren die Schritte, die Nutzer durchlaufen, um ein bestimmtes Ziel zu erreichen. Sie erfassen die Erfahrungen, Herausforderungen und Emotionen der Nutzer entlang ihres Weges. Dieses Werkzeug hilft, kritische Berührungspunkte zu identifizieren und Optimierungsmöglichkeiten aufzudecken.

Durch die Kombination dieser Werkzeuge wird ein umfassendes Verständnis der Nutzerperspektive geschaffen, das die Grundlage für effektive und benutzerfreundliche Designlösungen bildet. Die frühzeitige Einbindung von HCD hilft, Designfehler zu vermeiden und die Nutzerakzeptanz zu steigern [4].

3   Analyse der Nutzerbedürfnisse

Die Analyse der Nutzerbedürfnisse ist ein zentraler Bestandteil des Designprozesses, um eine benutzerfreundliche und effektive Lösung für internationale Studierende in Deutschland zu entwickeln. Im Vorfeld wurde der Prozess der Austauschstudierenden grob analysiert. Daraus haben sich zwei Benutzergruppenprofile ergeben: Austauschstudierende aus EU- und Nicht-EU-Ländern. Aufgrund der begrenzten Verfügbarkeit von Teilnehmenden konnten lediglich zwei Interviews durchgeführt werden, beide mit Studierenden aus dem Nicht-EU-Ausland. Diese Interviews wurden genutzt, um die Profile weiter zu verfeinern und Personas[6] zu entwickeln. Diese Personas dienen dazu, die Zielgruppe zu charakterisieren und die Anforderungen an den Prototyp gezielt zu definieren. Sie repräsentieren typische Nutzerprofile und helfen, die Designentscheidungen auf die Bedürfnisse der Zielgruppe auszurichten.

Der Hauptteil der Analyse basiert auf Interviews mit Austauschstudierenden, um die spezifischen Bedürfnisse, Herausforderungen und Ziele dieser Zielgruppe zu verstehen. Die folgenden Abschnitte fassen die wichtigsten Erkenntnisse aus diesen Analysen zusammen.

Zielgruppe

Die primäre Zielgruppe dieser Analyse umfasst vorrangig neue Austauschstudierende aus EU- und Nicht-EU-Ländern, da diese sich noch besonders gut an die vor kurzem durchlaufenden Prozesse erinnern.

Schwerpunkte der Interviews

Ein semistrukturierter Interviewleitfaden[7] wurde entwickelt, um die Erfahrungen, Motivationen, Ziele und Herausforderungen der Austauschstudierenden zu erfassen. Dabei wurden sowohl bürokratische als auch persönliche Aspekte beleuchtet. Zu den thematisierten Bereichen gehörten unter anderem:

- Aktivitäten zur Vorbereitung und nach der Einreise in Deutschland
- Visa-Prozess, Krankenversicherung, Wohnungssuche
- Persönliche Interessen und Ziele mit dem Auslandsstudium
- Kontext, Umstände und Umgebung, in denen Aktionen ausgeführt wurden
- Verbesserungsideen

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[6]Anhang A.1
[7]Anhang A.2

Die Interviews wurden transkribiert[8] und analysiert, um die wichtigsten Erkenntnisse zu identifizieren und die Bedürfnisse der Studierenden zu verstehen.

3.1 Motivationen und Ziele der Studierenden

Die Interviews mit den Austauschstudierenden haben eine Vielzahl von Motivationen und Zielen aufgezeigt, die ihre Entscheidung für ein Studium in Deutschland beeinflussen. Diese lassen sich wie folgt zusammenfassen:

- **Hochwertige Ausbildung:** Deutschland wird aufgrund seiner international anerkannten, qualitativ hochwertigen und zugleich erschwinglichen Ausbildung geschätzt.

- **Praxisorientierter Ansatz:** Deutsche Hochschulen bieten praxisnahe Lehrkonzepte, die von den Studierenden als Vorteil gegenüber rein theoretischen Ansätzen wahrgenommen werden.

- **Bessere Berufsaussichten:** Ein deutscher Abschluss gilt als Karrieresprungbrett, da er international hohe Anerkennung genießt und die Chancen auf dem Arbeitsmarkt verbessert.

- **Kultureller Austausch:** Viele Studierende sind motiviert, die deutsche Kultur kennenzulernen und Kontakte zu anderen internationalen Studierenden zu knüpfen.

- **Persönliche Weiterentwicklung:** Das Auslandsstudium wird als Möglichkeit gesehen, neue Erfahrungen zu sammeln und sich persönlich weiterzuentwickeln.

- **Reisen:** Die zentrale Lage Deutschlands in Europa bietet die Gelegenheit, während des Studiums andere europäische Länder zu bereisen.

- **Erfolgreicher Studienabschluss:** Im Mittelpunkt der Ziele steht für die meisten Studierenden der erfolgreiche Abschluss ihres Studiums.

- **Verbesserung der Sprachkenntnisse:** Viele Studierende streben an, ihre Deutschkenntnisse während ihres Aufenthalts zu vertiefen und somit ihre Integration und berufliche Perspektiven zu fördern.

Diese Erkenntnisse stimmen mit den Ergebnissen aus der Literatur überein: Studienbezogene Gründe wie bessere Berufsaussichten, innovative Studienangebote und forschungsorientierte Lehrmethoden sind zentrale Entscheidungskriterien für ein Studium in Deutschland [2], [3]. Ebenso tragen landesbezogene Faktoren wie die hohe Lebensqualität, Sicherheit und finanzielle Erschwinglichkeit dazu bei, dass Deutschland ein attraktives Ziel für Studierende weltweit ist.

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[8]Vollständige Transkripte im Anhang A.3

3.2 Herausforderungen und aktuelle Probleme der Studierenden

Der Übergang in ein Studium in Deutschland ist für viele internationale Studierende mit zahlreichen Herausforderungen verbunden. Die Interviews haben gezeigt, dass Schwierigkeiten in verschiedenen Bereichen auftreten:

Bewerbungsprozess:

- Verzögerungen bei Rückmeldungen der Universitäten führen zu Unsicherheiten und Ängsten.
- Die Einreichung physischer Dokumente wird als unnötig umständlich und zeitaufwändig empfunden und ist mit der Sorge vor dem Verlust originaler Unterlagen verbunden.
- Der Bewerbungsprozess umfasst viele Schritte, Dokumente und erfordert einen erheblichen Zeitaufwand.
- Viele Studierende ziehen die Unterstützung durch Vermittler in Betracht, da der Prozess sehr kompliziert erscheint, sind jedoch aufgrund hoher Kosten und Vertrauensprobleme oft unsicher.

Visaprozess:

- Lange Bearbeitungszeiten und unklare Verzögerungen im Visumverfahren führen zu erheblichen Unsicherheiten und Planungsproblemen.
- Die Terminvergabe für Visaangelegenheiten gestaltet sich aufgrund begrenzter Visa-Slots schwierig, und bürokratische Hürden wie das neue APS-Verfahren erhöhen die Komplexität.
- Probleme entstehen, wenn das Visum an eine falsche oder frühere Hochschulzulassung gebunden ist.

Unterkunft:

- Die begrenzte Verfügbarkeit von Wohnheimplätzen macht die Wohnungssuche besonders herausfordernd.
- Die Verifizierung privater Wohnungsangebote aus dem Ausland ist oft schwierig, was die Gefahr von Betrug erhöht.

Kulturelle und bürokratische Hürden:

- Sprachbarrieren in Ämtern und im Alltag erschweren die Kommunikation, da Englisch oft nicht ausreichend unterstützt wird.
- Unübersichtliche und sich ändernde Vorschriften führen zu Verwirrung.
- Die soziale Integration bleibt herausfordernd, da der Austausch mit deutschen Kommiliton:innen oft begrenzt ist.

Finanzielle Aspekte:

- Hohe Vorauszahlungen für Vermittler, Visa und Unterkünfte stellen eine erhebliche finanzielle Herausforderung dar.

- Hohe Mindesteinzahlungen auf das Sperrkonto[9], sowie unflexible monatliche Auszahlungen können in unvorhergesehenen Situationen zu finanziellen Engpässen führen.

Orientierung und Information:

- Viele Studierende fühlen sich nach der Ankunft orientierungslos und erhalten unzureichende Informationen über die nächsten Schritte.

- Prozesse und Zeitpläne sind oft unübersichtlich, was zu Unsicherheiten führt.

Weitere Herausforderungen:

- Die Anerkennung von Vorleistungen und Probleme bei der Konvertierung von ECTS-Punkten erschweren den akademischen Einstieg.

- Jobmöglichkeiten sind aufgrund von Visabestimmungen stark eingeschränkt.

Die genannten Herausforderungen decken sich mit Erkenntnissen aus Studien: Laut Beate Apolinarski & Tasso Brandt (2018) und Morris-Lange (2019) zählen Sprachbarrieren, finanzielle Einschränkungen, Schwierigkeiten bei der sozialen Integration sowie Orientierung im deutschen Studiensystem zu den häufigsten Problemen. Besonders die Wohnungssuche gestaltet sich problematisch – 47 % der Studierenden berichten von großen Schwierigkeiten, eine Unterkunft zu finden, während 34 % erhebliche Sprachprobleme angeben [2, S. 52; S. 64]. Auch bürokratische Prozesse, wie die Visa- und Anmeldeverfahren, und die Anerkennung von Vorleistungen gehören zu den häufigsten Hindernissen [2], [3].

Diese Erkenntnisse zeigen, dass die Optimierung bürokratischer Prozesse und die Bereitstellung klarer Informationen entscheidend sind, um den Studierenden den Übergang zu erleichtern.

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[9]Im Rahmen des Visumverfahrens dient ein Sperrkonto als Nachweis zur Lebensunterhaltsfinanzierung in Deutschland. (https://www.auswaertiges-amt.de/de/sperrkonto-375488)

3.3   Weitere Erkenntnisse aus der Analyse der Nutzerbedürfnisse

Die Analyse der Nutzerbedürfnisse hat zusätzliche Einblicke geliefert, die sowohl die genutzten Geräte als auch mögliche Verbesserungsideen betreffen:

Verwendete Geräte:

- Laptops und Desktop-PCs sind das bevorzugte Gerät für Recherchen, insbesondere bei komplexeren Aufgaben.
- Mobilgeräte dienen als Ergänzung für schnelle und unkomplizierte Recherchen unterwegs.

Kontaktpunkte und Informationsquellen der Studierenden

- Kontaktpersonen und Verantwortliche an der Heimuniversität
- Deutscher Akademischer Austauschdienst e. V. (DAAD)
- Uni-Assist
- Universitätsportale
- Websites wie mastersportal.com, studying-in-germany.org
- Webseite der Landeshauptstadt Dresden
- Persönliche Kontakte und WG-Mitbewohner
- Studentenorganisationen
- Vermittler

Verbesserungsvorschläge:

Auf Nachfrage wurden in den Interviews konkrete Verbesserungsvorschläge genannt, um die bürokratischen Prozesse für internationale Studierende zu erleichtern:

- **Optimierung des Visa-Prozesses:**
  - ‣ Regelmäßige Verfügbarkeit von Visum-Slots, um Wartezeiten zu minimieren.
  - ‣ Vereinfachte und klarere Prozesse für die Beantragung von Visa für Austauschstudenten, mit Fokus auf schnellere Bearbeitung und Terminvergabe.

- **Frühzeitige Zulassungsbenachrichtigungen:**
  - ‣ Universitäten sollten die Ergebnisse von Zulassungen oder Ablehnungen schneller bereitstellen, idealerweise innerhalb kürzerer Fristen (statt 2-3 Monate), um Studierenden mehr Zeit für die weiteren Schritte wie Visum, Unterkunft und Reisevorbereitungen zu geben.

- **Digitalisierung der Prozesse:**
  - ‣ Ersetzung physischer Dokumenteneinreichungen durch vollständig digitale Prozesse zur Reduzierung von Redundanzen und Steigerung der Effizienz.
  - ‣ Entwicklung zentraler Plattformen für die Verwaltung und Einreichung aller notwendigen Dokumente.

- **Schritt-für-Schritt-Unterstützung:**
  - ‣ Bereitstellung eines digitalen Tools mit:
    - – **Dokumentenchecklisten** für Visa, Krankenversicherung und Aufenthaltsanmeldung.
    - – **Schritt-für-Schritt-Anleitungen** für wichtige Prozesse wie Anmeldung und Aufenthaltsgenehmigungen.
    - – **Erinnerungen und Benachrichtigungen** zu Fristen und Terminen.

- **Mehrsprachige Unterstützung:**
  - ‣ Tools und Webseiten sollten sowohl in Deutsch als auch Englisch verfügbar sein, um Sprachbarrieren zu überwinden.

- **Integration hilfreicher Funktionen:**
  - ‣ **Kostenkalkulatoren** zur Budgetplanung.
  - ‣ **Terminbuchungs-Tools** für Behörden.
  - ‣ **Vernetzungsmöglichkeiten** mit anderen internationalen Studierenden.
  - ‣ **Notfallkontakte** und Informationen zu Arbeitsmöglichkeiten sowie Karriere- und Aufenthaltsgenehmigungen.

Diese Maßnahmen würden nicht nur die Bürokratie vereinfachen, sondern auch eine effizientere Planung und Integration der Studierenden in Deutschland ermöglichen.

3.4 Strukturierung der Erkenntnisse als User Journey Map

In Abbildung 1 ist ein Ausschnitt der User Journey Map dargestellt, welche auf Basis der Interviewergebnisse erstellt wurde. Sie zeigt wichtige Kontaktpunkte, typische Herausforderungen und die emotionalen Reaktionen der Studierenden während der verschiedenen Phasen. Ziel der User Journey ist es, kritische Berührungspunkte zu identifizieren und potenzielle Optimierungsmöglichkeiten aufzuzeigen.

Abbildung 1: Ausschnitt der User Journey Map

Der Ausschnitt zeigt zwei Schritte: die Wahl der Universität und die anschließende Bewerbung. Dabei werden durchgeführte Aktionen und zentrale Kontaktpunkte, wie die Stabsstelle Internationales der HTW Dresden oder externe Webseiten, aufgeführt. Zusätzlich bildet die User Journey auch die emotionalen Höhen und Tiefen der Studierenden ab: Während zu Beginn die Vorfreude auf das Auslandssemester überwiegt, führt die Fülle an Informationen und die Verteilung auf verschiedene Quellen häufig zu Überforderung während der Recherchephase. Die vollständige User Journey Map befindet sich im Anhang A.4 und visualisiert den gesamten Prozess der Austauschstudierenden bis zur Ankunft in Deutschland.

4 Ideal-Prozess-Analyse

Die Analyse des Ideal-Prozesses bildet eine Grundlage, um die tatsächlichen Abläufe der Bürokratie für internationale Studierende zu verstehen und diese mit den wahrgenommenen Herausforderungen aus den Interviews abzugleichen. Aufgrund der zeitlichen Begrenzung dieser Arbeit war es nicht möglich, Interviews mit detaillierten Fragen zu allen Prozessschritten zu stellen. Deshalb wurden die textuellen Prozesse auf der Website der Stabsstelle Internationales der HTW Dresden untersucht. Dadurch entstand eine wertvolle Vergleichsmöglichkeit zwischen dem ideal beschriebenen Ablauf und den subjektiven Erfahrungen der Studierenden.

Ziel der Analyse

Ein zentrales Ziel war es, den Prototyp zusätzlich zur Ausrichtung an den Bedürfnissen der Nutzer:innen mit den konkreten Inhalten des bürokratischen Prozesses zu füllen. Nur durch eine Kombination beider Ansätze kann eine Lösung entwickelt werden, die sowohl benutzerfreundlich ist als auch die notwendigen Informationen und Schritte präzise abbildet. Außerdem ermöglicht ein mit Inhalt gefüllter Prototyp eine realitätsnahe Evaluation und Optimierung, welche im HCD-Prozess essenziell ist.

Extraktion des Ideal-Prozesses

Der Prozess wurde zunächst aus den HTML[10]-Inhalten der Website extrahiert und im JSON-Format[11] dokumentiert. Dieses Format wurde gewählt, da es strukturierte Daten ermöglicht, die flexibel angepasst werden können und als Grundlage für die Entwicklung des Prototyps dienen kann. Die JSON-Struktur enthält zentrale Elemente wie Phasen, die verschiedene Schritte umfassen, sowie spezifische Anforderungen, darunter erforderliche Dokumente mit Name und Beschreibung. Der vollständige Prozess in der JSON-Struktur befindet sich im Anhang B.2. Da dieser als Input für die App dient, erleichtert er auch zukünftige Anpassungen. Sollte sich der Prozess ändern, muss lediglich die JSON-Datei aktualisiert werden, ohne dass größere strukturelle Änderungen an der App notwendig sind.

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[10]Die Hypertext Markup Language ist die Standardauszeichnungssprache für Dokumente, die in einem Webbrowser angezeigt werden sollen.
[11]JavaScript Object Notation ist ein offenes Standard-Dateiformat und Datenaustauschformat, das menschenlesbaren Text zur Speicherung und Übertragung von Datenobjekten verwendet, die aus Name-Wert-Paaren und Arrays bestehen.

Grafische Darstellung des Ideal-Prozesses

Um den Prozess besser zu verstehen und zu analysieren, wurde zudem eine grafische Darstellung des Prozesses mithilfe des Tools Mermaid erstellt. Ein Ausschnitt dieser ist in Abbildung 2 dargestellt.
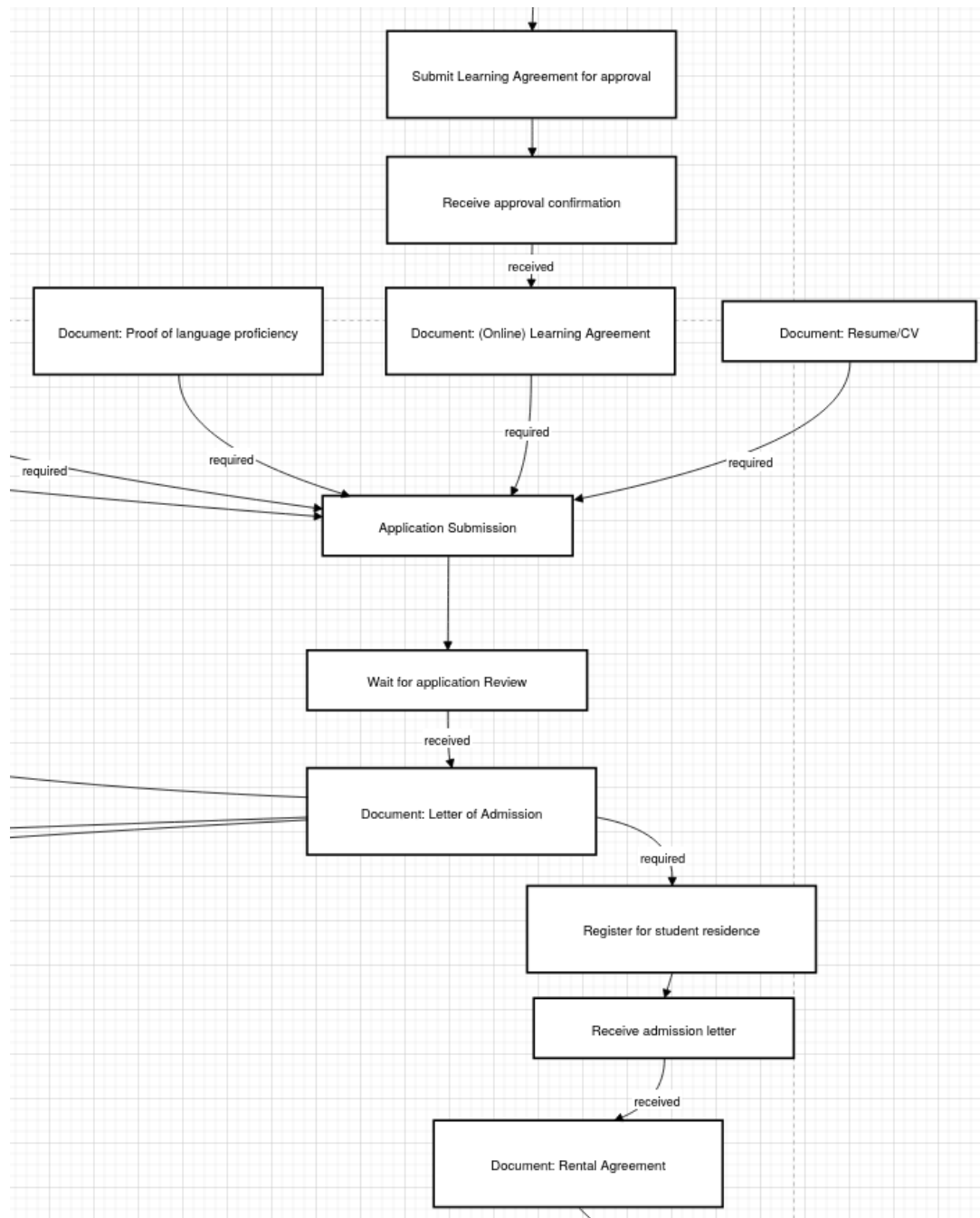

Abbildung 2: Ausschnitt des Ideal-Prozesses in Mermaid-Darstellung

Abbildung 2 zeigt klar die Verbindungen zwischen den einzelnen Schritten und die Reihenfolge der Aufgaben. Dadurch bietet sie einen klaren Überblick über:

- **Schritte und Phasen des Prozesses**, wie z. B. „Antragstellung und Zulassung" oder „Kursauswahl und Studienplanung".

- **Abhängigkeiten zwischen den Schritten**, um kritische Pfade und Engpässe zu identifizieren.

- **Notwendige Dokumente und Fristen**, die für den Erfolg der einzelnen Schritte erforderlich sind.

Diese Visualisierung erwies sich als hilfreich, um:

- Engpässe im Prozess zu erkennen, wie z. B. dass lange Wartezeiten bei der Zulassung den gesamten Prozess verzögern, da beispielsweise das Visum davon abhängig ist.

- Verwendungspunkte der Dokumente zu identifizieren, da viele Dokumente in mehreren Phasen und Schritten benötigt werden.

Erkenntnisse aus dem Austausch mit der Stabsstelle Internationales

Zusätzlich zu der eigenständigen Analyse des textuellen Prozesses wurde ein Gespräch mit der Stabsstelle Internationales geführt. Dieses hat wertvolle Einblicke in die tatsächliche Organisation und Kommunikation der bürokratischen Abläufe für internationale Studierende geliefert. Die Stabsstelle betonte, dass Studierende grundsätzlich selbst und proaktiv für die Erledigung der erforderlichen administrativen Schritte verantwortlich sind. Allerdings werden sie dabei aktiv durch die Stabsstelle unterstützt. Hierzu existiert ein fester Kommunikationsplan, in dem genau festgelegt ist, zu welchem Zeitpunkt welche E-Mails mit relevanten Informationen an die Studierenden versendet werden.

Ein wesentliches Problem, das sich in der Praxis zeigt, ist die geringe Nutzung der bereitgestellten Informationsquellen. Obwohl die Website der Stabsstelle umfassende Anleitungen und Erklärungen zu den notwendigen Prozessen bietet, wird sie von den Studierenden kaum genutzt. Gleichzeitig besteht auch bei den versendeten E-Mails das Problem, dass viele dieser Nachrichten nicht gelesen oder nicht ausreichend beachtet werden.

Eine weitere zentrale Erkenntnis war, dass der optimale Ablauf vorsieht, dass Studierende bereits vor ihrer Ankunft in Deutschland alle wesentlichen bürokratischen Schritte einleiten. Idealerweise sollten alle notwendigen Anträge bereits aus dem Ausland gestellt werden, sodass die Studierenden nach ihrer Ankunft direkt auf alle erforderlichen Dokumente und Bestätigungen zugreifen können. Die Möglichkeit, viele Formalitäten schon

vorab zu erledigen, wird jedoch nicht immer konsequent genutzt. Dadurch entstehen Verzögerungen, die sich negativ auf die gesamte Ankunfts- und Integrationsphase auswirken können.

Diese Erkenntnisse unterstreichen die Notwendigkeit einer verbesserten Bereitstellung und Strukturierung von Informationen sowie einer gezielteren Kommunikation mit den Studierenden. Ein zentraler Aspekt für die Optimierung des Prozesses besteht darin, die Studierenden frühzeitig und auf eine Weise zu erreichen, die sie tatsächlich wahrnehmen und nutzen. Die Ergebnisse der Ideal-Prozess-Analyse bilden somit die Grundlage für die Entwicklung eines Prototyps.

5 Konzeption und Design des Prototyps

5.1 Grundlagen des Prototyps

Anhand der Erkenntnisse aus der Analyse der Nutzerbedürfnisse und dem Verständnis für den Ideal-Prozess wurden die wichtigsten Features des Prototyps identifiziert. Diese sollen die größten Herausforderungen der internationalen Studierenden adressieren und ihre Ziele bestmöglich unterstützen.

Berücksichtigung von Nutzungskontexten

Bei der Entwicklung des Prototyps muss der Nutzungskontext der Zielgruppe berücksichtigt werden. Da internationale Studierende sowohl mobile als auch Desktop-Geräte nutzen, vgl. Abschnitt 3.3, sollte die Anwendung auf beiden Plattformen optimal funktionieren:

- **Mobile Nutzung:** Die App sollte responsiv und für die mobile Nutzung optimiert sein. Dies umfasst eine klare, reduzierte Darstellung von Informationen, die Möglichkeit, Sitzungen zu unterbrechen und später fortzusetzen, sowie eine intuitive Navigation.
- **Desktop-Nutzung:** Auf Desktop-Geräten sollte die Anwendung mehr Details und umfangreiche Funktionen bieten, wie z. B. die Möglichkeit, Dokumente hochzuladen oder längere Checklisten zu bearbeiten.

Benutzerfreundlichkeit

Die Anwendung sollte intuitiv und einfach zu bedienen sein, um die Akzeptanz und Nutzung durch die Studierenden zu maximieren. Dazu gehören:

- Klare, verständliche Sprache und visuelle Hierarchien.
- Minimierung von Klicks und Schritten, um Aufgaben zu erledigen.
- Barrierefreie Gestaltung, um auch Nutzer mit geringen Deutsch- oder Englischkenntnissen zu unterstützen.

5.2 Priorisierung der wichtigsten Features

Basierend auf den identifizierten Herausforderungen (Abschnitt 3.2) und den geäußerten Bedürfnissen der Studierenden wurden folgende Features als besonders wichtig eingestuft:

1. **Statusanzeige**
   - **Funktion:** Eine übersichtliche Darstellung des aktuellen Fortschritts und ein klarer Indikator zur Dringlichkeit von Terminen und offenen Aufgaben.

- **Vorteile:**
  - ‣ Schneller Überblick, ob Verzögerungen drohen oder alles im zeitlichen Rahmen liegt.
  - ‣ Echtzeit-Erinnerungen für Fristen und Termine, um Prokrastination und Versäumnisse zu vermeiden.
- **Relevanz:** Adressiert die Unsicherheit und Überforderung durch komplexe Prozesse, fehlendes Zeitgefühl und späte Rückmeldungen.

2. **Anpassung des Tools an die aktuelle Situation der Studierenden**
   - **Funktion:** Das Tool passt sich den individuellen Bedürfnissen der Studierenden an, indem es nur relevante Informationen und Schritte anzeigt.
   - **Vorteile:**
     - ‣ Vermeidung von Informationsüberflutung durch gezielte Filterung.
     - ‣ Berücksichtigung von Faktoren wie Herkunftsland (EU/Nicht-EU), Studiengang und persönlichen Interessen.
   - **Relevanz:** Erhöht die Benutzerfreundlichkeit und Effizienz, indem es den Fokus auf das Wesentliche lenkt.

3. **Zentrale Schritt-für-Schritt-Anleitungen und Dokumentenliste**
   - **Funktion:** Ein digitaler Kompass, der die Studierenden durch alle bürokratischen Prozesse führt, von der Bewerbung an der Universität bis zur Meldung im Bürgerbüro.
   - **Vorteile:**
     - ‣ Checklisten für jeden Schritt, angepasst an Herkunftsland und Studienziel.
     - ‣ Integrierte Vorlagen für Anträge und Links zu offiziellen Formularen.
   - **Relevanz:** Reduziert Fehler, spart Zeit und mindert Unsicherheit bei der Bewältigung bürokratischer Hürden.

Begründung der Priorisierung

Die gewählten Features adressieren die **kritischsten Problemstellen** aus den Interviews:

- **Bürokratie** (häufigste Beschwerde) wird durch klare Anleitungen und Terminmanagement entschärft.
- **Unsicherheit** (z. B. bei Fristen oder Dokumenten) wird durch die Statusanzeige und übersichtliche Schritt-für-Schritt-Anleitungen reduziert.
- **Informationsüberflutung** wird durch Personalisierung und gezielte Filterung vermieden.

Diese Features lassen sich ohne Prozessänderungen umsetzen, da sie als übergeordnete Hilfsmittel agieren. Sie ermöglichen es den Studierenden, eigenständiger zu handeln und sich auf ihre Kernziele aus Abschnitt 3.1 zu konzentrieren, statt in Bürokratie zu versinken. Eine vollständige Liste aller angedachten Features kann im Anhang C.1 eingesehen werden.

5.3 Konzeption der einzelnen Features

Anpassung des Tools an die aktuelle Situation der Studierenden

Die zukünftige Anwendung ist nicht für jeden Nutzer gleich, sondern passt sich individuell an die Lebenslage[12] der Studierenden an. Dies geschieht durch eine Selektion der Prozessschritte und Informationen auf Grundlage von Attributen wie Herkunftsland, Aufenthaltsdauer, Studienziel und Startdatum des Semesters. Dadurch kann die Anwendung die richtigen Informationen zum richtigen Zeitpunkt bereitstellen und unterstützt die Studierenden so effizient bei der Bewältigung ihrer Aufgaben.

Das korrekte Erfassen der Lebenslage ist essenziell, da sonst die falschen Informationen angezeigt werden. Beispielsweise benötigen Studierende aus dem Nicht-EU-Ausland detaillierte Informationen zu Visum und Krankenversicherung, während diese Informationen für EU-Studierende irrelevant wären. Durch diese maßgeschneiderte Bereitstellung relevanter Inhalte wird ein personalisiertes Nutzererlebnis geschaffen.

Fragen zur Konzeption:

- Welche Attribute müssen abgefragt werden, um die Lebenslage zu erfassen?
- Kann die Situation oder der Status dynamisch über vorhandene Dokumente verfolgt werden, ohne zusätzliches Zutun der Nutzer?

Um die Lebenslage der Studierenden individuell zu erfassen, werden verschiedene Angaben benötigt. Diese können beispielsweise durch ein Formular, wie in Abbildung 3 dargestellt, erfasst werden.

---

[12]Eine Lebenslage bezeichnet eine Situation im Leben einer Person, die Bedürfnisse, Rechte oder Pflichten umfasst und eine Interaktion mit der Verwaltung erfordert.

Persönliche Informationen

Name

Max Mustermann

Herkunftsland *

Italien ▼

Zweck des Aufenthalts *

Vollzeitstudium ▼

Dauer des Studiums *

3 Jahre

Startdatum *

01.10.2025 📅

Art des Startsemesters

Wintersemester

Gewählter Studiengang an der HTW Dresden

Wirtschaftsinformatik (Bachelor)

Weiter

Informationen zu deiner aktuellen Situation

Ich befinde mich in folgender Phase:

Vor der Anreise in Dresden ▼

Die folgenden Schritte habe ich schon durchgeführt:

☑ Bewerbung eingereicht

☐ Visum beantragt

☐ ...

☐ ...

Die folgenden Dokumente besitze ich:

☑ Online Learning Agreement (OLA)

☐ Studienzulassung

☑ Reisepass

☐ ...

✚ Weiteres Dokument hinzufügen

Bestätigung der privaten Krankenversicherung ▼

Weiter

Abbildung 3: Prototyp - Erfassung der Lebenslage

Dazu gehören persönliche Daten wie der Name zur Personalisierung der Anwendung sowie das Herkunftsland, das über ein Dropdown-Menü mit Suchfunktion ausgewählt werden kann. Zudem sind Informationen zum geplanten Auslandssemester relevant, darunter die Art des Aufenthalts, die Aufenthaltsdauer, die darüber entscheidet, ob ein Visum erforderlich ist, sowie das Startdatum, das für die Berechnung wichtiger Ereignisse, wie Fristen für Visumanträge oder Wohnungssuche genutzt wird. Weitere notwendige Angaben umfassen das Startsemester, beispielsweise das Wintersemester, und den Studiengang in Dresden. Der Entwurf dieses Formulars ist in Abbildung 3 (links) dargestellt.

Darüber hinaus wird in Abbildung 3 (rechts) die aktuelle Situation der Studierenden erfasst. Dazu gehört die Angabe der aktuellen Phase ihres Aufenthalts, also ob sie sich vor, während oder nach dem Studienbeginn befinden. Innerhalb dieser Phasen können Studierende schon einige Schritte wie die Einreichung der Bewerbung oder die Beantragung eines Visums durchgeführt haben. Ergänzend dazu werden die bereits vorliegenden Dokumente abgefragt, darunter das (Online) Learning Agreement, der Zulassungsbescheid etc.

Anhand der bereits durchgeführten Schritte und der vorhandenen Dokumente lässt sich die Lebenslage präzise bestimmen. So wird sichergestellt, dass die Anwendung stets auf die individuelle Situation der Studierenden zugeschnittene Informationen und Unterstützung bereitstellt.

Im weiteren Verlauf soll die Lebenslage durch die abgeschlossenen Schritte und die erhaltenen Dokumente weiterverfolgt werden.

Statusanzeige

Um Studierenden eine klare Orientierung über ihren Fortschritt im gesamten Prozess zu ermöglichen, bietet die Anwendung eine Statusanzeige mit mehreren Elementen. Diese erlaubt es den Nutzern, sich jederzeit über ihren aktuellen Stand zu informieren und offene Aufgaben frühzeitig zu erkennen.

Die Statusanzeige umfasst verschiedene visuelle Elemente, welche in Abbildung 4 dargestellt sind.
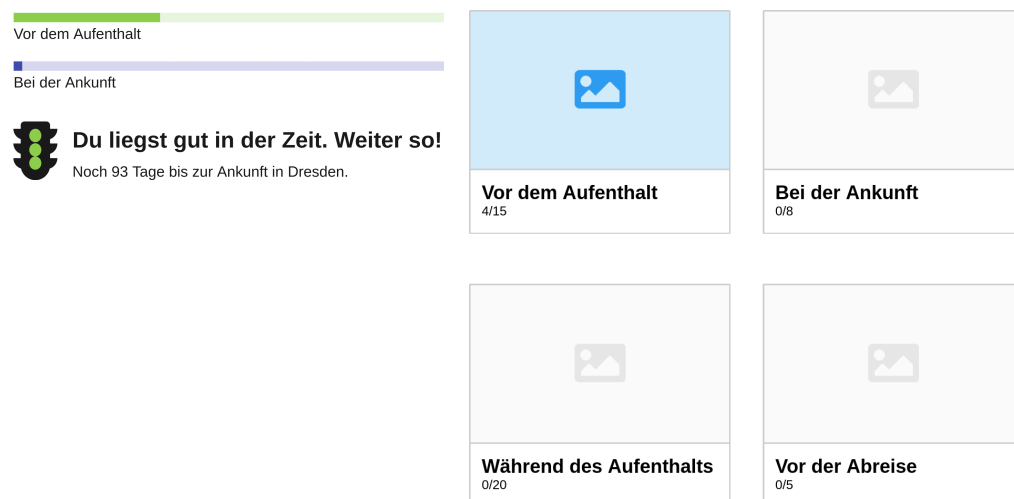
Abbildung 4: Prototyp - Statusanzeige

- **Fortschrittsbalken**: Zeigen den aktuellen Stand innerhalb der jeweiligen Phase an und ermöglichen eine schnelle Einschätzung der verbleibenden Schritte, prototypisch dargestellt in Abbildung 4 (links oben).
- **Ampelsystem (rot, gelb, grün)**: Gibt eine sofort verständliche Rückmeldung über den Gesamtstatus und warnt bei drohenden Verzögerungen. Warnungen können beispielsweise bei Fristen für Visumanträge oder Einschreibungen helfen, siehe Abbildung 4 (links unten).

- **Kanban-Board**: Bietet eine strukturierte Übersicht über alle Phasen und zeigt farblich markiert die aktuelle Phase sowie bereits abgeschlossene und noch ausstehende Schritte, dargestellt in Abbildung 4 (rechts).

Durch diese unterschiedlichen Darstellungsformen wird die Komplexität des Prozesses reduziert, und Studierende können sich gezielt auf ihre nächsten Aufgaben konzentrieren.

Zentrale Schritt-für-Schritt-Anleitungen und Dokumentenlisten

Um die Komplexität des Verwaltungsprozesses weiter zu reduzieren, bietet die Anwendung strukturierte Schritt-für-Schritt-Anleitungen und eine zentrale Dokumentenverwaltung. Diese Funktionen erleichtern es den Studierenden, sich auf die wesentlichen Aufgaben zu konzentrieren und notwendige Dokumente griffbereit zu haben. Der Entwurf für diese Funktionen ist in Abbildung 5 abgebildet.

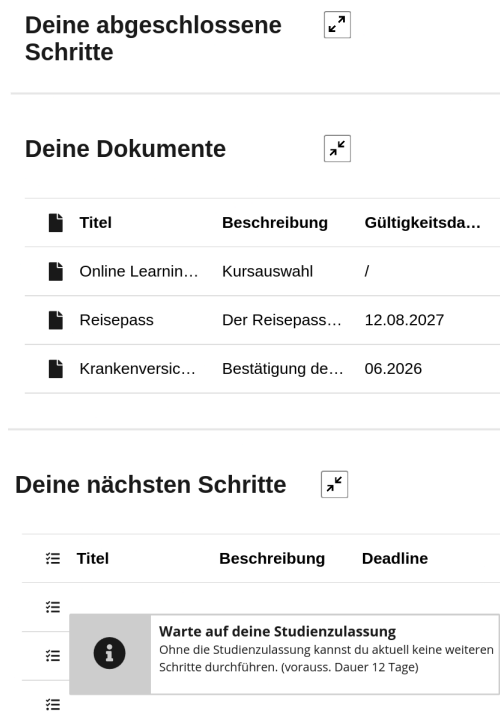Abbildung 5: Prototyp - Dokumentenliste und nächste Schritte

Folgende Elemente sind enthalten:

- **Schritt-für-Schritt-Anleitungen**: Die Studierenden erhalten eine dynamische Übersicht über die nächsten Schritte, wobei jeweils nur die für ihre aktuelle Situation relevanten Aufgaben angezeigt werden. So wird vermieden, dass Nutzer mit irrelevanten Informationen überflutet werden, dargestellt in Abbildung 5 (unten).

- **Dokumentenlisten**: Eine zentrale Verwaltung der bereits hochgeladenen oder erhaltenen Dokumente ermöglicht es, diese bei weiteren Schritten direkt zu verwenden. So kann beispielsweise ein bereits hochgeladenes Visum-Dokument automatisch für die nächste Phase berücksichtigt werden, siehe (Abbildung 5 (mittig)).

- **Hinweise bei Wartezeiten**: Falls Studierende auf bestimmte Dokumente warten müssen (z. B. Zulassungsbescheid oder Visum), gibt die Anwendung eine Einschätzung zur erwarteten Bearbeitungsdauer und informiert darüber, wenn Verzögerungen auftreten könnten, dargestellt in Abbildung 5 (unten) .

Diese strukturierten Anleitungen und Dokumentenlisten helfen, Unsicherheiten zu reduzieren und den Prozess klarer zu gestalten.

Zur besseren Übersicht von Abhängigkeiten und Zeitplanung dient Abbildung 6:
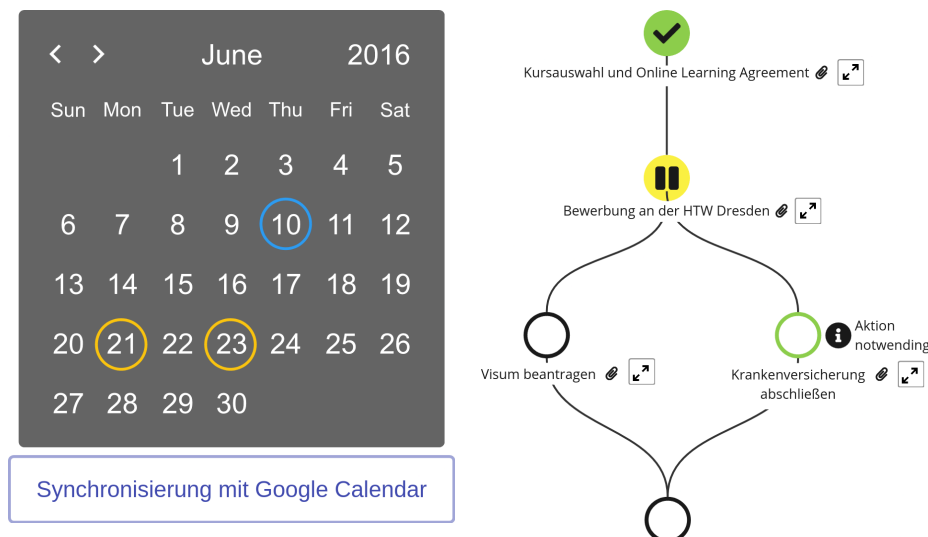
Abbildung 6: Prototyp - Kalender und Graph

- **Kalenderansicht**: Diese zeigt alle relevanten Fristen, Termine und Meilensteine übersichtlich an. So behalten Studierende ihre Deadlines im Blick und können sich frühzeitig auf kommende Aufgaben vorbereiten. In Abbildung 6 (links) dargestellt.

- **Graphenansicht**: Die Abhängigkeiten zwischen einzelnen Schritten werden visualisiert, um Studierenden ein besseres Verständnis für den gesamten Prozess zu ermöglichen. Dies hilft insbesondere bei komplexen Prozessen mit mehreren Abhängigkeiten, wie z. B. dem Zusammenspiel zwischen Visumsantrag und Immatrikulation. In Abbildung 6 (rechts) dargestellt.

Grafiken zu den vollständigen Oberflächen des Prototyps sind im Anhang C.2 zu finden.

6 Diskussion und Ausblick

Zusammenfassung der Ergebnisse

Der entwickelte Prototyp adressiert gezielt die zentralen Herausforderungen, mit denen ausländische Studierende im bürokratischen Prozess konfrontiert sind. Durch die Kombination aus personalisierten Informationen, zentraler Statusanzeige und klar strukturierten Schritt-für-Schritt-Anleitungen werden Studierende gezielt durch die erforderlichen administrativen Schritte geleitet. Der Ansatz stellt sicher, dass die relevanten Informationen zur richtigen Zeit bereitgestellt werden und reduziert somit Unsicherheiten sowie mögliche Verzögerungen.

Validierung und Iterationen

Die Wirksamkeit der entworfenen Funktionen und des Designs muss durch umfassendes Nutzerfeedback überprüft werden. Erst durch eine iterative Weiterentwicklung können potenzielle Schwachstellen identifiziert und behoben werden. Geplante Maßnahmen zur Validierung umfassen Nutzertests mit internationalen Studierenden, Interviews mit Verwaltungsmitarbeitenden sowie die Analyse realer Nutzungsdaten, um die Benutzerfreundlichkeit und Effektivität des Systems weiter zu optimieren.

Validierung des Ideal-Prozesses

Ein entscheidender nächster Schritt ist die Überprüfung der abgeleiteten Prozessstruktur durch die Stabsstelle Internationales, um sicherzustellen, dass alle erforderlichen Daten korrekt erfasst und verarbeitet werden.

Potenzial und Übertragbarkeit

Der entwickelte Ansatz lässt sich auf weitere Hochschulen übertragen, wobei lokale Verwaltungsstrukturen und spezifische Regelungen berücksichtigt werden müssen. Langfristig könnte das System als Standardlösung für digitalisierte Verwaltungsprozesse an Hochschulen etabliert werden. Neben der Unterstützung internationaler Studierender kann der Prototyp auch die bürokratischen Abläufe für ausländische Fachkräfte optimieren. Durch eine interaktive und strukturierte Anleitung würden neue Mitarbeitende in Deutschland effizient durch Visa-, Melde- und Anerkennungsverfahren geführt.

Fazit

Der Prototyp zeigt, dass eine nutzerzentrierte Verwaltungsanwendung einen erheblichen Beitrag zur Reduzierung bürokratischer Hürden für ausländische Studierende leisten könnte. Er bietet eine strukturierte Unterstützung bei der Durchführung administrativer

Prozesse und trägt dazu bei, Unsicherheiten zu reduzieren und den Studierenden eine bessere Orientierung zu ermöglichen.

Dabei bleibt die zentrale Frage bestehen, ob es sich lediglich um eine Symptombehandlung handelt oder ob langfristig auch eine Optimierung der zugrundeliegenden Prozesse angestrebt werden sollte. Während die Anwendung den Studierenden hilft, sich effizient durch den bestehenden Prozess zu navigieren, könnte eine weitergehende Vernetzung der Behörden und eine Verkürzung von Antwortzeiten zusätzliche Effekte erzielen.

Letztlich bleibt zu diskutieren, inwiefern der Prototyp auch für andere Hochschulen oder Städte adaptiert werden kann und ob er eine breitere Anwendung in der Vereinfachung bürokratischer Prozesse für ausländische Studierende finden könnte.

Zukünftige Arbeiten könnten sich auf die Validierung des entwickelten Prototyps sowie auf die technische Implementierung konzentrieren.

Literaturverzeichnis

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[2] Beate Apolinarski und Tasso Brandt, „Ausländische Studierende in Deutschland 2016", *Bundesministerium für Bildung und Forschung (BMBF)*, 2018.

[3] S. Morris-Lange, „Dem Demografischen Wandel Entgegen: Wie Schrumpfende Hochschulstandorte Internationale Studierende Gewinnen Und Halten", 2019.

[4] T. Farooqui, T. Rana, und F. Jafari, „Impact of Human-Centered Design Process (HCDP) on Software Development Process", in *2019 2nd International Conference on Communication, Computing and Digital Systems (C-CODE)*, März 2019, S. 110–114. doi: 10.1109/C-CODE.2019.8680978.

Selbstständigkeitserklärung

Ich versichere, dass ich die vorliegende Arbeit selbständig verfasst und keine anderen als die angegebenen Quellen und Hilfsmittel benutzt habe.

———————————————   ———————————————
Datum, Ort   Alexander Schulz

Anhang

Anhangsverzeichnis

A Ergänzendes Material zur Analyse der Nutzerbedürfnisse

A.1 Personas

A.1.1 Persona EU-Ausland

Persona 1: Lukas Nowak

- Alter: 23 Jahre
- Herkunft: Polen
- Studienrichtung: Informatik (4. Semester)
- Dauer des Aufenthalts: 1 Semester (Erasmus-Programm)
- Sprachkenntnisse: Polnisch (Muttersprache), Englisch (sehr gut), Deutsch (fortgeschritten)

Über Lukas:

Lukas studiert Informatik an einer Universität in Warschau und hat sich für ein Austauschsemester an der Hochschule für Technik und Wirtschaft Dresden (HTWD) entschieden. Er interessiert sich besonders für Künstliche Intelligenz und sieht den Aufenthalt als Chance, neue Lehrmethoden kennenzulernen und sein berufliches Netzwerk in Deutschland zu erweitern.

Ziele:

- Erfolgreicher Abschluss seines Erasmus-Semesters und Anerkennung der erbrachten Leistungen an seiner Heimatuniversität.
- Verbesserung seiner Deutschkenntnisse, um sich auf eine spätere Karriere in Deutschland vorzubereiten.
- Teilnahme an Hackathons und IT-Veranstaltungen, um Kontakte in der deutschen Tech-Community zu knüpfen.

Frustrationen:

- Unterschiedliche Anforderungen der Heimat- und Gastuniversität erschweren die Kurswahl und die Anerkennung von Leistungen.
- Trotz fortgeschrittener Deutschkenntnisse sind behördliche Formulierungen oft schwer verständlich.
- Lange Wartezeiten bei der Anmeldung in Dresden und fehlende digitale Prozesse für Studierende aus dem EU-Ausland.

Verhalten und Herausforderungen:

- Lukas informiert sich vorab gründlich über Prozesse, findet aber oft widersprüchliche oder unvollständige Informationen.

- Er ist es gewohnt, Behördengänge online zu erledigen, stößt in Deutschland jedoch auf viele papierbasierte Prozesse.

- Die deutsche Bürokratie wirkt im Vergleich zu Polen komplizierter.

- Er hat Probleme mit der Wohnsituation, da kurzfristige Mietverträge für Studierende schwer zu finden sind.

A.1.2 Persona Nicht-EU-Ausland

Persona 2: Zhang Wei

- Alter: 24 Jahre

- Herkunft: China

- Studienrichtung: Maschinenbau (Masterstudium)

- Dauer des Aufenthalts: 2 Jahre (kompletter Master)

- Sprachkenntnisse: Chinesisch (Muttersprache), Englisch (fließend), Deutsch (B1-Niveau)

Über Zhang Wei:

Zhang Wei kommt aus Peking und hat sich für ein Masterstudium in Maschinenbau an der HTW Dresden entschieden. Er hat bereits ein Auslandssemester in den USA absolviert und ist es gewohnt, sich in einer internationalen Umgebung zu bewegen. Er spricht etwas Deutsch, fühlt sich aber nicht sicher genug, um komplizierte Behördengänge ohne Hilfe zu bewältigen.

Ziele:

- Erfolgreich den Masterabschluss in Maschinenbau erwerben und Praktika in Deutschland machen.

- Netzwerke in der deutschen Industrie aufbauen, um später in Europa zu arbeiten.

- Mehr über die deutsche Kultur und Sprache lernen, um sich besser integrieren zu können.

Frustrationen:

- Probleme, alle notwendigen Dokumente rechtzeitig zusammenzustellen (z.B. Meldebescheinigung, Visum).

- Schwierigkeiten, die Anforderungen für das Visum und den Aufenthaltstitel zu verstehen und umzusetzen.

- Hohe Bürokratie und unterschiedliche Informationen auf verschiedenen Webseiten.

Verhalten und Herausforderungen:

- Zhang hat Schwierigkeiten mit der Beantragung seines Visums und der Verlängerung seines Aufenthaltstitels, da der Prozess kompliziert und zeitaufwendig ist.

- Er hat lange Wartezeiten bei der Terminvereinbarung für die Anmeldung und die Beantragung des Aufenthaltstitels erlebt.

- Die Informationsbeschaffung zu behördlichen Anforderungen ist für ihn zeitintensiv und oft unübersichtlich, da viele Informationen auf Deutsch sind.

A.2 Interviewleitfaden

Interview Guide: Human-Centered Design for a Prototype

Goal: To gather insights on the real-life experiences of international students when dealing with bureaucratic processes in Germany and identify pain points and opportunities for improvement.

1. Introduction (5 minutes)

- **Introduce yourself and the project:**

  ‣ „Thank you for taking the time to meet with me today. I'm working on a project that aims to simplify the bureaucratic processes for international students in Germany. We're developing a digital tool that will make these steps easier to navigate."

- **Purpose of the interview:**

  ‣ „Today, I'd like to hear about your experience so far – from the steps you've completed to any challenges or frustrations you've encountered. This will help us design a tool that truly meets the needs of students like you."

- **Confidentiality and consent:**

  ‣ „Your answers will be used for the design of the tool, but everything you say will remain anonymous and confidential. Is it okay if I take notes and record our conversation?"

2. Pre-arrival Preparation (10 minutes)

- **University search and application process:**

  ‣ „How did you decide which universities to apply to?"

  ‣ „What tools or websites did you use to gather information?"

- ‣ „Was there anything unclear or difficult when it came to gathering the necessary documents and applying?"

- ‣ „What were the biggest challenges or confusion points for you when dealing with <…> in Germany?"

- ‣ „Was there any information you found confusing or difficult to understand regarding <…> ?"

- ‣ „What would have made the <…> process easier for you?"

- ‣ „Did you feel there were enough resources available to help you navigate <…>? If not, what resources would have been helpful?"

- **Visa application:**

  - ‣ „What has been your experience with applying for your student visa?"

  - ‣ „Were there any delays or issues?"

  - ‣ „How did you find out about the steps you needed to take for your visa application?"

  - ‣ „What were the biggest challenges or confusion points for you when dealing with <…> in Germany?"

  - ‣ „Was there any information you found confusing or difficult to understand regarding <…> ?"

  - ‣ „What would have made the <…> process easier for you?"

  - ‣ „Did you feel there were enough resources available to help you navigate <…>? If not, what resources would have been helpful?"

- **Accommodation:**

  - ‣ „How did you find and apply for accommodation?"

  - ‣ „Which challenges did you face?"

  - ‣ „Did you need to submit any documents physically, and if so, was that a burden?"

  - ‣ „What were the biggest challenges or confusion points for you when dealing with <…> in Germany?"

  - ‣ „Was there any information you found confusing or difficult to understand regarding <…> ?"

  - ‣ „What would have made the <…> process easier for you?"

  - ‣ „Did you feel there were enough resources available to help you navigate <…>? If not, what resources would have been helpful?"

- **Health insurance**:

‣ „Did you know that health insurance is required for enrollment in Germany? How did you find out about this requirement?"

– „Were you able to find clear information about health insurance requirements before arriving in Germany?"

– „Which resources or websites (e.g., DAAD) did you use to gather information about health insurance?"

‣ „Was it clear to you what type of health insurance you need (private or public)?"

‣ „What steps did you take to apply for health insurance?"

‣ **EU-Students => Recognition of EHIC:**

– „Did you already have a European Health Insurance Card (EHIC) or equivalent before coming to Germany? Was it easy to get your coverage recognized by a German health insurance provider?"

– „Were there any limitations on the healthcare services your EHIC or national insurance covers in Germany?"

– **Verification Process:**

• „Was the process of getting a certificate from a German health insurance provider to confirm your coverage straightforward?"

• „Did you encounter any issues when trying to get your insurance verified by a German statutory health insurance provider?"

‣ **Non-EU-Students => Recognition of Private Insurance:**

– „Did you have private health insurance from your home country? If yes, was it recognized in Germany, or did you have to switch to a German statutory insurance?"

– „Did you encounter any challenges or delays in getting your private insurance validated by a German statutory health insurance provider?"

– **Upfront Costs and Reimbursement:**

• „Since you are privately insured, how has the process of upfront payments for medical services and reimbursement been?"

• „Were there any surprises or issues with covering the costs of treatments in Germany through your private insurance?"

‣ „What were the biggest challenges or confusion points for you when dealing with <… > in Germany?"

‣ „Was there any information you found confusing or difficult to understand regarding <...> ?"

‣ „What would have made the <...> process easier for you?"

‣ „Did you feel there were enough resources available to help you navigate <...>? If not, what resources would have been helpful?"

- **Semester fee**:

  ‣ „Did you know that you have to pay the semester fee before the start of your semester in Dresden?"

  ‣ „Which ressources helped you determine the amount to pay and gave further instructions?"

3. Arrival and general overview (10 minutes)

- **First steps after arrival**

  ‣ "When did you arrive in Germany and what were the first steps you took to officially register?"

  ‣ "Did you already receive certain documents or information before your arrival that prepared you for these processes?"

- **Orientation upon arrival**

  ‣ "How did you find out about the necessary steps after your arrival? Did you receive support from the university, the Welcome Center of the City of Dresden or other institutions?"

  ‣ "Did you know about the help from the university or the Welcome Center of the City of Dresden?"

- **Feeling of preparation**

  ‣ "Did you feel well prepared for the administrative tasks that came your way, or were there things that were unclear or confusing?"

4. First Steps in Germany (15 minutes)

- **Registration at the Einwohnermeldeamt (residents' registration office):**

  ‣ „Have you already completed your registration at the Einwohnermeldeamt? If yes, how was the experience?"

  ‣ „If you haven't done it yet, do you know what steps you need to take? Is anything unclear?"

- **Other administrative steps:**

▸ „Have you had to deal with any other bureaucratic steps since arriving in Germany, such as bank accounts or phone contracts? What was that experience like?"

- **Language barriers:**

  ▸ „Did you encounter any issues related to language during these processes? Were the instructions available in a language you're comfortable with?"

5. Personal interests (10 minutes)

- Do you plan on visiting other neighboring countries as well?

- What are some other activities you did instead of going through all the bureaucratic processes?

- Searching hobbies, fitness studio other interests …?

6. Situation and used devices (2 minute)

- „When did you complete the steps mentioned above? (Morning, evening, traveling)"

- „What devices did you use? (Mobile, Laptop, Desktop, e.g. Arbeitsmittel)"

7. Challenges and Pain Points (10 minutes)

- **Major challenges:**

  ▸ „What were the most difficult parts of the process for you? Was there any step where you felt confused or frustrated?"

  ▸ „Which steps seemd confusing to you?"

  ▸ „Did you feel like the information you needed was easy to find, or did you have to search in many different places?"

- **Support and communication:**

  ▸ „Did you receive any support from the university or other organizations during these steps?"

  ▸ „If yes, how helpful was that support? If not, what would have been helpful?"

- **Digitization and online processes**

  ▸ "Did you have to complete many of these processes in person on site or were you able to complete some of them online?"

  ▸ "How would you rate the user-friendliness of the online systems?"

8. Feedback and Improvement Ideas (10 minutes)

- **Suggestions for improvement:**

  ▸ „Based on your experience, how could these processes be made easier?"

  ▸ „Are there any specific tools, apps, or websites that could have helped you?"

- ‣ "What would be an ideal solution for you to make the processes simpler and more accessible? (e.g. a central platform, better communication, multilingual information)"
- ‣ „What features would you want in a tool designed to support international students with bureaucracy?"

- **Positive examples:**

  - ‣ „Were there any aspects of the process that worked really well? Can you think of any good practices from your home country or other experiences that might be helpful here?"

- **Technology and user preferences:**

  - ‣ „Would you prefer to have an online tool or app to guide you through these processes step by step? What would be the most important features?"
  - ‣ „Would you like to receive reminders or notifications for deadlines (e.g., for visa renewal or registration)?"

9. Closing (5 minutes)

- **Thank them for their time:**

  - ‣ „Thank you so much for sharing your experience. Is there anything else you would like to add that we haven't discussed so far? It will be incredibly helpful in shaping the prototype."

- **Next steps:**

  - ‣ „As we move forward with the development, would it be okay if I contact you again for feedback on the prototype once it's ready for testing?"

- **Final thoughts:**

  - ‣ „Is there anything else you'd like to add that we haven't covered yet?"
  - ‣ "Thank you again for your time and support!"

A.3 Transkripte der Interviews

A.3.1 Erstes Interview

Datum: 21.10.2024

Zeit: 10.00 - 10.30 Uhr

Ort: Google Meet

Interviewer: Alexander Schulz (I)

Interviewpartner: Austauschstudierender (B)

I: Perfect. Okay, yeah, then I think we could start with the real deal now. Okay, so the purpose of this interview is to know more about the steps you already took the problems with those steps. I mean, especially for you, you haven't got your visa yet. So everything is scheduled behind. I think that could be a nice topic to talk about. because in the end we don't want to see what the processes currently are in theory but what they are in practice. So you currently are in this situation. You applied for a visa and stuff and you already had some issues with it. And I hope to improve it later on. Yeah, so maybe that's a good icebreaker. Could you tell me what's the issue that you haven't got your visa yet?

B: So, regarding the visa, recently German consulate and embassy, I think they are not releasing the visa slots as much as they wish to release before. So that's the major reason. Yeah. And the students are facing the consequences for it. So I would suggest German government, please improve this system, because the students are facing a lot. The bachelor students, the master students, they are told by the university to defer their semesters. And the one who doesn't have the option to defer the semesters, they are told to again apply next year. So this is the major. Yeah, that's bad.

I: That's really bad. Okay, I didn't know about this issue. So was applying for the visa your first step you took when preparing for your exchange studies or what did you already do?

B: So the first step was that I sort listed out the universities. Then I got yeah, I sort listed around seven to eight university. I had a good. Yeah. Am I audible?

I: Yeah, you're audible.

B: Yeah. So the first step was that I sort of started the university. Seven to eight universities last year. I think it was during November or December time period. I had a good score in bachelor's so I just tried to go with the 7 to 8 university. I applied there and I received admission from two of the universities. And I was in waiting list for two of the universities and got rejection from three of the universities. So that was because of the credit. I did

not match the credit system that is already in Europe. right so one was the acceptance was from one was from i think it was from uh it's near about uh wildau technical university of wildau i think yeah one was wildau and the other is the dresden one htw dresden so i thought of going with htw dresden so after that i received the admission i got I got enrolled and now I am waiting for my visa. And even I applied for my dormitory in August and by the mid of September I was assigned with dormitory. So these are the process that I have already done with, I have completed.

I: So first of all you applied for the university, you searched for university then you applied, then you already searched for accommodation in Dresden?

B: Yes. Yeah, and I got the enrollment. Yeah, I have my visa interview on 31st of October.

I: Okay, but did you already face some other issues while applying at the universities other than the The credit score not matching with one of your home universities?

B: So before applying to Germany, I was searching about many other countries. And the best is that German university and their university portal. They are the excellent one. They have provided each and every information regarding the course, the modules and the career prospectives. So I didn't have a hard time while choosing my course or selecting my course. So it was the best thing that I have faced. There were no any challenges. You can say, with all the documentation and all, that would be manageable. That is manageable.

I: What do you think, how much time did you already spend on all the processes Or maybe you could divide for searching for university searching for courses and searching for accommodation and stuff

B: So for me it was around a year I took. Okay. Almost a year. Yeah. So the first month, one and a half months or two months. Yeah. I spent in searching the university. Yeah. Then then searching the models and all matching the modules and all my course modules that if that is suitable for me or not. So I spent around two to three months in that. Yeah. And then after that, usually the application for winter semester starts. I think it's in April. Yeah. During the month of Yeah. Yeah. Yeah. So until I think it's until July, then the application process goes until July. Yeah. And that is around three to four months. Yeah, the application process takes around three to four months, then we get the rejection or the acceptance within, you can call say around one month. We start getting the acceptance, I think in August. Yeah. August and September. That is how I divided the time.

I: But isn't that quite bad that you are getting the notification that you are accepted in August when you still have to choose for accommodation and for your visa? Wouldn't it

be better if you got the notification earlier that you are accepted and that you can study the next semester in Germany?

B: That totally depends upon the country's policy that you cannot change anything. I think Germany has that policy. So I think being an international student, we are to follow that rules. So I think it's a bit hectic. Yeah. After getting the acceptance letter, we don't have much time. We are in rush to apply for the visa and financial statements and all. So it's a bit challenging. But yes, being international student, you got to manage that. however.

I: And did you got any support any any contact persons you could contact when you had any issues or where did you got the basic information from your home University so you can.

B: So basically I searched on DARD there's a website called DARD yeah and you have the university yeah you have all the information of the University is there and even the uni assist portal. They are the best ones. Yeah, they have each and every course course over there. So as per the requirement, you can apply there. And during the application process, if I had any query or anything, I just mail them and even to the university's professor personally. Yeah, and they used to reply. So it was great.

I: Okay, that sounds nice because I know that my university has this online page where all the steps are listed, what you have to do before the semester, after the semester starts and at the end of the semester. Like a little checklist where you only have to follow the steps and then you're basically fine. You don't have to do your own research.

B: That is what German university is best for. They will provide with the detailed information.

I: I am not sure the formulas you had to fill out. Were they mailed to you or did you just download them online? Or were they on online site where you could enter all your information and apply for the universities?

B: So basically the international students need to follow the uni assist portal. They are the third party. If you have any information regarding the uni assist. They are the third party. They are the third party. They are merged up with the university. And basically all the international students apply there. So directly there are there are very few universities that we can apply directly to the university. Otherwise, we need to come through the uni-assist portal. We need to upload our documents, which and everything over there, the language requirements, the transcript and all that. And they will forward it to the university if our requirement matches.

I: OK. That sounds quite convenient. So you just have to enter all everything in one portal and you don't have to let each university separately. separately. Yeah okay have you already planned on doing a German language course or have you already done one or is it just required to be good in English B2 or C level or what the requirement

B: Basically my course is totally an English based program Once I had enrolled in German classes during it was I think around July and even I was working yeah I was full-time employed at that time so I took around two months and then it was not possible for me managing the safety and taking the classes cooking for myself so I dropped the classes and The best thing is that in my course German Business and International Management, I do have a language.

I: Ah you have?

B: Yeah, so they will be teaching German A1. That is the best thing.

I: Yeah, I think the A1 course is quite good because it's not not only about the language but it's It's also about the culture and stuff. I guess so that might be interesting. Yeah. Okay. What else is on my list? Was it required when you… I remember from my starting times when I applied at the HDW Dresden I had to send all my documents per mail. Was it necessary for you or was it just online at the Uni-Assist-Portal and then it was forwarded or did you have to sign it on paper and send it per mail to the university and stuff?

B: Yeah, so for the resident, STW resident, what I need to do that the enrollment paper, right? I downloaded them. Yeah, that was the requirement. and I had to download them from the portal and then sign it, then courier it back to the university. So I think that was not needed at all. That was a big, I think hectic one because as we already have enrolled and all. So again, signing the documents, sending to president by courier, that was not relevant for me at all. But yeah, again, being an international student. Yeah, I got to follow. Yeah.

I: Yeah, that's true. Okay, so I have one thing more on my not only one thing more, but we can talk about. So your goal here at the university then is just to study or is it also? I think I yeah, maybe I can elaborate a little bit. I also did an exchange studies half a year ago. And for me it was Yeah, studying is great. and it's interesting but it's also more about the culture and being in a different country and having the free time there and spending time with other people. Is that also part of your interest in coming to Germany or is it just studying and then?

B: No, so being an international student yeah that is the plus point that we got to learn about the other culture, basically the German culture and the international students culture and to say my culture. So that will be also be my part and Roman own Germany, understand Germany in most more better way and also visit the nearby countries that is near Germany. Yeah okay so

I: so you also want to travel a little bit then when we're when you're coming to Germany yeah yeah Have you already checked for some information about traveling around Europe and from Germany to the neighbor countries?

B: Ah. Yeah, so the nearest. country by Dresden. I think it's the Paraguay thing.

I: Yeah, yeah, it's a Czech Republic.

B: Yeah, so I think it's a two hour train ride. I think yeah, yeah, yeah, yeah, so I thought of traveling there and maybe later on to the nearby country that is I think the The other one is Poland i think?

I: Yes. Yeah. Okay. So I think you're quite independent by choosing all the universities and following all the processes. Did you ever have the feeling of needing more support from a university or from

B: I was totally focused on the support given by university only I used to mail them whenever I got confused and they used to reply that yeah you got to follow these steps yeah you will find this material over here you can look over that yeah so they were assisting a lot i never had a feeling that i need to go to a consultant or a consultancy and consult with them yeah so it was quite an independent process because i earlier i told you that for germany they have mentioned each and everything on the portal the university portal yeah regarding the course modules and each and everything so it's far better easy yeah for a student for the international student to apply in Germany okay that sounds nice

I: yeah yeah so overall you are quite satisfied with the process how it went and

B: yeah very much satisfied

I: Okay, I think for maybe we already talked about nearly everything I have on my list and I don't want to steal any more of your time. Maybe it's even better if we can reschedule another meeting so I can like summarize everything we talked about today and then identify the gaps I still have and

B: for sure.

I: Write new questions. Because it's quite overwhelming while asking all the questions and taking notes and stuff. I'm not doing interviews all the days. And I'm not very practiced on doing these things. Or do you have any improvement ideas on your mind already? How we could improve the processes and ..?

B: There are few. I would like to request the German Consulate and The German embassy. Just to focus on the visa slots. The international students are applying. They need to get the slots. They don't need to defer the semester or apply next year. Doing that, they will be losing their interest and time. The German embassy and consulate should focus on this one. This is the suggestion I would like to give them otherwise they are perfect.

I: Okay. I'm not sure if I can change anything related to the visa enrollment and process and the amount of slots but I can check if there is something related to this process that would make it easier but I'm not sure

B: You can suggest them this.

I: You said you're arriving in Dresden mid-November, right? We could also meet in person then, when you are in Dresden. Yeah, if possible. For sure. Yeah, we can check that after I arrive. Perfect. So thank you very much for your time. I don't want to and longer this meeting anymore because what was quite very very helpful already okay I just disconnected okay yeah some technical stuff I was okay yeah but it's Everything is working again. I will let you know if I need any more information from you. For sure you can text me just on my number. I will be there. Thank you for having me. You are very helpful actually. Yeah, and let me say my experience right. Yeah. I hope you'll have a good time in your research work. Thank you very much. Yeah. Okay, have a nice day and hopefully everything works out for you. Yeah. Thank you, thank you so much. Thank you. Thank you. Bye bye. Bye. you

A.3.2 Folgefragen zum ersten Interview

Dieser Fragebogen wurde nach dem Interview and den Interviewpartner gesendet, um weitere Informationen zu erhalten. Die Antworten wurden per E-Mail übermittelt und zur übersichtlichen Darstellung in diesem Dokument zusammengefasst.

1. General

1. Which steps confused you the most?

   • The steps, which confused me the most was ECTS conversion because, I have completed my entire bachelor's from India and we don't have such system. However, Uniassist helped a lot in the entire process regarding the application.

2. Which steps took you the longest?

   • Visa process took me the longest due to unavailability of visa slot for interview, i.e. near about 3 months.

4. What annoyed you the most during the whole process?

   • The time period the university took to respond back after the university application annoyed me the most.

2. Health Insurance Questions

1. Did you know that health insurance is required for enrollment in Germany? How did you find out about this requirement?

   • Yes, I was very much aware about the health insurance which is a mandatory for every student. And I came to know about it while I was applying to the universities.

2. Was it clear to you what type of health insurance you need (private or public)?

   • Yes, I was very much clear about the type of insurance required.

3. What steps did you take to apply for health insurance?

   • Being an international student, we need to open a block account in order to prove our financial requirement, so we do have an option regarding the health insurance and travel insurance along with opening the blocked account. (Coracle, Expatrio)

3. Semester Fee Questions

1. Did you know that you have to pay the semester fee before the start of your semester in Dresden? How did you find out about this requirement?

   • Yes, I was very much aware about the semester fee contribution. And this information is clearly mentioned on the university portal.

3. Which resources helped you determine the amount to pay and gave further instructions?

- Regarding the more information about the payment, it was one of the members of the university from the administrative section who emailed regarding the payment and the amount to be paid.

4. Device and Situation Questions

1. When did you complete the steps mentioned above? (Morning, evening, traveling)
   - I completed the above-mentioned step, whenever I had a free time.
2. What devices did you use? (Mobile, Laptop, Desktop)
   - Mobile and laptop.
3. Which sources and online services helped you a lot?
   - Sources such as Daad.de, Uni-assist and universities application portal helped me to ease my process.
4. How would you rate the user-friendliness of those online systems?
   - Solid 9/10

5. Personal Interest Questions

1. Do you plan on visiting other neighboring countries as well?
   - Yes, I do want to visit neighboring countries as well, I want to explore along with my studies.
2. What are some other activities you did instead of going through all the bureaucratic processes?
   - E.g. searching for hobbies, fitness studio, other interests
   - E.g. searching for public transport availability
   - E.g. searching for country specific laws and regulations
   - E.g. searching for activities like partying or social clubs
   - …
   - I searched more about the rules and regulations and also focused on searching about the transportation systems in Germany.

6. Improvement ideas

1. Based on your experience, how could these processes be made easier?
   - Based on my experience, I was totally satisfied during my entire process, however I would like to request for the improvement in visa process (visa slots are to be made available on regular basis).
2. Are there any specific tools, apps, or websites that could have helped you?

- I don't think other website or other social media platforms could have helped me more, because entire process was made easier by sources

3. What would be an ideal solution for you to make the processes simpler and more accessible?

   - Ideal solution to make the entire process easier could be the universities should not take so long time to announce the result of acceptance or rejections, this can be done in short period of time instead of taking 2-3 months, and embassy should be focusing more on the visa process, they need to think of making it easier.

4. What features would you want in a tool designed to support international students with bureaucracy?

   - Would you prefer to have an online tool or app to guide you through these processes step by step?

   - Would you like to receive reminders or notifications for deadlines?

   - A tool for international students in Germany could include a document checklist for visas, health insurance, and residence registration, with step-by-step guides for bureaucratic processes like Anmeldung and residence permits. It should feature multi-language support, appointment booking tools, and cost calculators for budgeting. Integration with government APIs, document translation help, and networking opportunities with other students would enhance convenience. Emergency contacts and career/work permit guidance would complete the package.

7. Final thoughts

1. How would you summarize your overall experience dealing with the bureaucratic steps as an international student in Germany? Did you feel supported, frustrated, overwhelmed, or something else?

   - I would summarize the entire process "Satisfied", and from my experience I felt supported.

A.3.3 Transkription des zweiten Interviews

Datum: 14.11.2024

Zeit: 07:00 - 07:45 Uhr

Ort: Google Meet

Interviewer: Alexander Schulz (I)

Interviewpartner: Austauschstudierender (B)

I: Okay, then let's get started. You are here for two years already. Do you still remember the steps you took at the beginning, like before arriving in Dresden and searching for universities? Do you think you could tell me about those?

B: Yeah, I can tell you about it. um actually you know there are different ways of applying to a university right so i don't know whether you have an experience or people here like germans or students who are applying from germany to a university have a experience of doing through it a middle person like you all do it directly right you do you search by yourself and do it but actually people, students from abroad, not everyone, but mostly students in India would be having a middle person in between the university. Like there would be an agent who would have a better idea who is here and who would have a better idea about the university, the place and everything.

I: So you have a direct contact person in India that's like referring you to some university?

B: No, I had someone to help me from Germany so that he knows a better place in India so in Germany which which place is better like you know for example Ingolstadt is not similar to Dresden yeah like when you go to Ingolstadt it is little bit I feel like it's little bit uh not so much populated like Dresden right so he he was he was here for almost four years and he was there to support me like which is the best university or which area is good like where it is more populated there are more more students such such things so he was there to help me to apply and for me the process was actually easier because he was there to help me you understand what i mean uh the only issue i faced was that some universities won't give you a proper reply like whether you are accepted or rejected that was the only issue I had during the application process and after the process when you apply for a visa there was a delay like especially from HTW Dresden and I applied for visa with actually i got admission to tu ilmenau and i applied for visa with the application of tu ilmenau and i began in the year and it i started application uh for visa i submitted the application for visa on june in the year 2022 and i received the visa in august like it was almost 90 days so you know and you uh and the the problem was like acceptance from HTW Dresden

was received on like august 19th and someone who is receiving the first admission of a university in the in in like in that year for example if i'm i didn't have any any other uh universities accepted and i received the first acceptance letter from HTW Dresden in the in the month of august then only i can start my visa procedures so when i started it would take again 90 90 days for example it is said like 40 to 49 to 90 days that's expected visa application or visa um like what do you say whether you accept or reject you you get a visa so you know for from for example i and to get a appointment for visa it's very difficult it's very difficult you don't get a date very easily in the office appointment office so you know like if for example if i'm getting it on august 19th then i have to wait again maybe two or three weeks for an appointment or i should i should have someone who is in high power so that he can he she can give me an appointment like ask for me on behalf of me then um then probably the classes in hattay would start on september 27th or 29th right so again i wouldn't be able to join if i didn't have any other admission so it's quite a delay like in that sense yeah i heard it already yeah Yeah, I had some friends who came to HTW Dresden in the month of November. And from HTW Dresden, like from international office, there is a deadline of arrival. Like you come in person and enroll in the university. So for them, it was like around November 30. and there was one guy who arrived in the on november 29th or on the on the just day the just the day before his deadline and he arrived he he arrived in frankfurt after a 18 hours flight he traveled from frankfurt to drosten for maybe six to eight hours then he he i think he didn't have a proper sleep he directly went to the office on the next day and enrolled like the tension is so much like you have so much tension on that time so i think i think i have heard i don't know how the exact procedure goes when you submit an application i think it comes to germany the city uh looks after your admission everything is okay your documents is okay and they seal the visa for you that's what i have heard and it comes back to india like post oh yeah so i think that delay is happening here like in in maybe in germany that delay is happening i don't know where exactly the delay occurs of course you know what i mean

I: yeah yeah the visa process is just too

B: long and yeah yeah yeah yeah that's what i understood this is two years back okay i don't know how it has changed so far yeah

I: but you said you could apply for the visa before you get the acceptance letter at the university?

B: HTW Yeah, because I got admission already in other university. Some other university.

I: Okay. That makes sense. Yeah. Okay.

B: So, originally in my visa, it's like I am accepted to TU Ilmenau. Like, literally, I am accepted to that Bundesland and not in Saxony. You know what I mean? So, when I was looking for part-time job, also, it was quite difficult for me because in that visa it's written like that so but then I went to the slander office I said I have an issue like this so they wrote a another letter for me or she okay she's she has done her city registration here her university is here and her study period is for this much time so that she doesn't have any restriction in working in Dresden or Saxony and yeah like that

I: okay but i mean it it's good for you that you could start applying for the visa earlier so

B: yeah yeah for me it was so lucky yeah

I: you had a little bit of time yeah um so let's let's take a step back um how did you find out about all these steps you steps you need to take for the visa application

B: so it there are different people who are like influencers from india or maybe any other part of asia i say especially asia because i think from country to country there are different norms for people applying right yeah for application so from india itself there were there were many influencers here and they used to do detailed videos in youtube so and and also there are some websites i don't remember which websites i i used to go through that and also this person who was helping me he also said to me this is how things work and in and i was also working for a education consultancy who who who taught where they taught german and also were helping students to apply for fsj au pair and Ausbildung and also for masters so i since i was in the administration i was also able to know about this is how things work

I: so so many different sources of information

B: yeah that's how i i understood yeah

I: okay so but what was there a point where you were quite confused and you didn't know what what to do or did you still had your agent or personal contact that helped you out a lot

B: yeah there was a person helping me but uh at one point i i was like uh because there are there there were other students who were applying all by themselves all by themselves because i didn't take that step because you know um because i had a fear whether it won't work the way i want or whether i will lose the documents all those fear was there because obviously i have to send it from India to Germany. And it was quite, even if it's a small thing, I was a little bit afraid with all those things. So I thought, okay, I will do it with

someone who is already in Germany because it's easier for me. And because that person was also visiting India on the time when I wanted to start my application. So I was able to actually see that person in person so that I can give my documents in hand and I don't lose it because we are giving most of our original certificates and all those things right so like yeah so at one point when I started working at the education consultancy I felt like oh this is not a big process all of this I can do it by myself and obviously I have to pay some money to this agent also so I thought okay I will do it by myself then I started and I applied to two or three universities And that when I didn't start getting any reply from the university like whether you're accepted or rejected. So that was something I felt, oh, this is giving me tension, that feeling. Otherwise, it was fine.

I: Understandable. I probably would have done the same.

B: yeah yeah well i think i think most of them done it does that because you know it's easy like you don't have to take all the tension

I: yeah that's true okay um you said you you applied at many different universities yeah how did you evaluate it which universities to apply to or how did you create the list from of universities

B: uh i did i i did my background is economics so uh business and economics so i i went through everyone says that DAAD the website dad oh yeah and there is one more website i don't remember uh i don't exactly remember but on that site also you can use the it's very user friendly and like you can give filters what what field you want to study like the course the medium of instruction it's english or german or it's mix or how many duration do you want to study and how much fees do you want to pay in the university and in which location all those things when you give you in the initial time i didn't i didn't i was not concerned about the location so i just gave the field the what graduation i should have like masters then which stream and how many years it should be so yeah so then dad sorted out all the list of the courses and i went through each of it and you know you can access the website of the university also and also a curriculum would not curriculum what is what what is the objective of the course is also described in DAAD so and and the requirements is also given so i thought yeah that's that's what i used and i made an excel sheet which all universities i want to apply to and i send it to this person and this person was sorting it out and suggesting me okay this place would be nice um there are some contacts I have on that place where you can even ask about how was the course all such things that's how I search for the courses

I: it would be great if you could send me a link of this website after the interview you don't have to search now but this would be great as a reference for maybe the prototype I'm developing to maybe integrate or at least link to this website because it's so helpful. Yes, okay, so we talked about visa and about a university search and application. Was there a difficulty to gathering all the necessary documents for you?

B: um no not really i didn't have any difficulty i think application to germany i felt is when i talk with people who have gone to usa canada australia uk because these are all the places where students usually go from india for higher education when i compare with them i feel it was so much easier for me because when you come to india for masters i don't think you need some vaccination or something for the visa application like you have to declare that you have taken for example um what would i say for example measles vaccine or hepatitis b vaccine so such things so i don't know exactly which is there because i didn't have to do that people who are coming to germany for master's degree they don't have to do but for Ausbildung i'm not sure whether they have to do it so but uh my friends who are going to uk canada and all they have to go through a medical examination okay yeah so it's not so much like they have to uh declare that they have taken all this vaccination in their life and yeah something like that yeah all those things they have to do it but for me i didn't have to so uh i would say for germany it's the easiest like application to germany is very easy yeah but uh after that after i came in the year 2022 right after that in the year 2023 yeah yeah towards the end of 2022 the indian um indian and the german embassy something they decided that all the students who want to apply for a master's degree they have to do a certification like it's called aps and i didn't go through that luckily but the people who went through that it was so much they said it was so much delayed like it took six months to get a aps certification it means that i i feel like uh they are evaluating your certificates are uh original and it's not fake because there has been several several um issues with students who are applying from india who produce uh fake certificates like they don't pass the bachelors and they produce the fake one so uh something like that so so to make sure that you are uh applying with original certificates and also uh like you are you're really really eligible for higher education for example if you're bachelors you're eligible for masters like that so you they have to do ap certification and my juniors my like who came after my course uh and like after my semester they said to me they it took six six or five or six months to get a result of that like get a but right now it has been speeded up like it now it takes only one month or something but for them like what happened for them the visa was issued for six months something but people who came for the winter

semester 2023 they received a visa for one year for me yeah for me it's six months uh then the people who came after me a few of them i i only know a few of them for them also it was six months but people who came after that they received for one year oh okay yeah and right now who is coming they also say that they receive it only for six months because aps aps has been speeded up and they receive it for i don't know what what does that um calculation but they say like that

I: interesting

B: yeah there is so much how they there are so much regulation changes all those things happened in two years that's why i specified to you that i came in the year 2022 because things have changed yeah like even with the city registration i think when i came i didn't knew that no one said to me that every tuesday and thursday there is a free slot to go like you don't have to book a term in to do a city registration in Dresden but right now you have tuesday and thursday without you can go without an appointment

I: oh yeah i guess that was still something of the corona pandemic

B: ah okay okay i i no one said so i thought oh there there has been a lot of changes happening.

I: Okay, I know that it's a requirement in Dresden to have a health insurance when you start studying. Could you tell me something about the health insurance process?

B: Yeah, for us it is obviously necessary to produce a health insurance and travel insurance document so I all before coming to Dresden and I already had a health insurance registered

I: okay yeah so you could use your original health insurance also in Dresden

B: yeah yeah yeah but I did one thing I changed the company like from you know TK to Barmer oh yeah that's that that's the only thing I did but otherwise i already had it so i didn't and and they are like from barmer itself they are very friendly when i compare with tk my friends say most of my friends have tk and they say oh they are not so much uh friendly or they don't give you proper answers but for me i feel like barmer is giving you good answers and they respond to what what is your needs so

I: are there any language barriers when you

B: No, like Barmer is very English friendly even they are calling like a toll number, they also have an English version.

I: Ah, okay, that's nice.

B: The customer service is having English version and they also have an app and like if there is any updation they would send a mail sometimes even post also. that's what I felt it's really but in the office not everyone speaks German English so they use translators to communicate so it's fine

I: okay so they find a way to help you

B: yeah yeah the only thing is that their rate is little bit higher than TK like if it's for TK if it's 1.30 euro for Barmer it's 1.35 or 1.37 euro that's the thing but I don't think that's a big friends.

I: Okay. Thanks for your input. Maybe I should consider changing my health insurance as well.

B: I don't know anything else, any other companies. But this is what I experienced and I hear from people who have other insurances.

I: Okay. One one important part also accommodation have you applied at the students domitory?

B: yeah I already did it before because uh that a good question like when i was when i thought i won get into any other university other than tu ilmenau i started looking for accommodation because in tu il mino it was not easy to get an accommodation and the person who was helping me he also tried his best but you know there was nothing like student dormitory something so i was looking outside in … but when it came to dresden but that's a good surprise like uh ilmenau was smaller than dresden but they don't have place in dormitory but dresden on that time dresden had a lot of spaces in dormitory and i was easily accepted but i didn't get into the place which i applied for but i got a place in the student elementary and it was easy the page was really user friendly you can apply easily read understand everything and apply and but i hear right now it's very very difficult for students to get a place in student dormitory and something which i felt which is not good is that they don't give space to students who already have a masters like if they have it's if it's this is their second masters they don't give space in student geometry but it's only from international students that i've heard but i don't know if it's for others like a few of my friends it's their second masters in germany and they don't they didn't get the space in student dormitory so actually it was struck some struggles for them to find a place outside because you know you're applying from india you don't see the place in person you don't know whether they are existing or not and you're like blindly like trusting them and uh giving all the money or everything right that was an issue i think still now it's a big issue

uh because luckily from comparing to berlin or such big cities uh dresden is very less in scams i feel so because right now when i moved out of the student geometry also it was like i felt there is less scam but there is scam but the very less uh like i would all if you are developing an app i would really help suggest you to put all the links of the places or app websites or anything where students can look for accommodation if they don't get the space in student dormitory because right at the right moment like many people like Like we have a WhatsApp group where all the, I come from India and from a state and there are, we made a WhatsApp group where people who are coming from that same state can communicate or ask for help or anything. So in that group every day, there is some person who is asking, Oh, is there an apartment to sublet? Is there a place to sublet? Do you know any leads like that? Because, and when we ask them in person, they say that they're, it's their first masters and they got a mail from the dormitory that there is no place anymore to accommodate. So, sorry, we have to look out. Like, they have to look outside. So, you know, like, it's quite difficult if you're coming as a first person. First time, if you're in Germany, it's difficult. So, in my time, it was not difficult, but right now, I feel it's very difficult for students to find an accommodation outside.

I: Yeah, I think so. it's uh everything is full there are so many students already

B: yeah but then also they are doing their best like uh the Studentenwerk is doing their best i think so because i have heard some people say um that um in the initial they said they don't have space but then they had some spaces and i think they have some waiting list schedule also so that if you are in the first or second place maybe if they have two spaces that came up maybe they write to you or in this dormitory we got a space maybe you can if you pay the caution deposit today you can take that room like that i think they do that because i i know with Hochschule because you know there are some demanded uh student dormitories in dresden like wohnstrasse hochschule strasse and all petersburg so to get into that you are in a waiting list so i think the similar system is also there to give a room and it's full yeah yeah

I: i just checked the time we are actually already over the interview time do you still have some time i still have some

B: you said to me till 7 45 right

I: ah yeah you're right yeah okay so good good okay um yeah so then let's talk about some steps after your arrival um do you still remember the steps you took to officially register like the einwohnermeldeamt and

B: yeah yeah yeah i remember because uh when i arrived i already got a message from student dormitory that i arrived in night and they said i said to them i will be arriving at night so uh can you how can you give me the keys for the room so what they did is that they put it in the box in the entrance like with the code you have to open and you get the key so uh do you want it from there or from the air from the airport like from what's

I: from the airport would be better actually

B: yeah ah okay so um like uh i know it is germany so you have to be prepared like if they ask you anything because it's immigration obviously even it's like even if you see a police you will get a you'll get some even if you don't do any crime you get a scare you you will be fearing me so uh and i was little bit uh anxious whether they speak english also that also that was also my anxiety and i had a relative who was living here in germany for past 30 or 35 years and they are living in the this is east side right they are living in the west side like near to holland oh yeah yeah yeah and when i said to them like i'm coming all those things um like um what they said is that oh it's east germany like people are not very friendly all such things so i was a little bit afraid and anxious about it So I was expecting, I thought, you know, it's our perspective. I was thinking it would be the same thing everywhere in Germany. And I already know Germans are very straightforward. They sound rude, but they are not rude. So I was a little bit, everything was a mixed feeling when I was in the immigration. So, but I think it was a male officer. I don't exactly remember. He said, oh, in which city do you, did you get admission? I said, this is it. but anyway it's a it's t-will minnow it's fine uh it was quite friendly then we came out i took the luggage then uh i had a friend to help me to catch the ic to trust and then i already have a cousin living in russian so uh he helped me uh with um like picking me up from the uh station to dropping me at student dormitory because it was very near and then i collected the key because i said they already had written me a mail with a code okay this is the code uh this is how you collect it i got i got the room and i already made friends in the dormitory because um it was seven sharing and three of two of them were um uh from um my own place no four or five of them were from my own state and three of them i already two of them i already knew before coming here because i kept up my mind i asked in the in that group which i said or did anyone get into good scout stress like that and they messaged me oh i got into good scout stress said this is my room number and they arrived uh two weeks earlier than me so they are familiar with the place so like uh they were also i was able to easily adapt to it so it's fine then uh on the next day i they said to me the what you have to do next is that you have to go for a collection of your accommodation contract and even i got the

message from a student elementary that in this time you have to come for a student like contract signing then i went um and you know um actually there in google map google map gives you a straight way to go to the office but there are different other ways also so that That was a little bit confusing for me. But I went there, signed the contract. Yeah, the officer was a little bit old and she didn't speak good English. But since I learned a little bit German, I understood something what she said. And which I didn't understand, she translated. So it was fine for me. Then when I was waiting for her appointment, I met someone else from the place I'm coming from, India. and she she was helping a new girl so i asked her what is the next procedures what you have to do i have heard you have to do the city registration and this girl helped me to get an appointment in one of the auslander office for city registration and i saved and i saved the appointment i got a then on that day I went with a passport everything for the city registration yeah all that was quite easy for me I feel so that's nice that's a good

I: that's nice that's a good feedback

B: yeah yeah that's what I remember actually

I: okay perfect that sounds good. What about some personal interests? We talked a lot about some bureaucratic steps and all those formal things, but I also did the exchange one year ago and for me it was also about learning the culture and traveling some neighboring countries. Do you have some similar goals or was it for you mainly the studying and also i don't know tell me something about it

B: for me um the main thing the other main thing which i forgot to add to choose Dresden and was that in my course there was an erasmus semester it was a compulsory erasmus semester so i thought okay why not this course because it's offering you erasmus you are not applying you it offering you so why not so I that why I chose it and when I throughout my life in dresden i feel um it has um actually um it a life lesson too like um everything that you perceive is not in real like the perspective perception or perception what you have in life is not actually it shouldn't be real every time right so i felt people here are more friendly and there are more international people in dresden too like many like from different different countries and i was able to do my exchange and it was quite a learning lesson in germany and also i went to poland so it was different in poland too but i learned like people in dresden um i i had a contact with people dresden more so germans think that uh oh polish people are not really good like that they have a perspective like that but so i was also like oh my god is it going to be worst when i be there uh such feeling but it

was the total opposite they were super friendly uh and they're i feel they are more open-minded people they are they are ready to have a open conversation but here it's difficult because it in general it said that germans are not ready for small talks right

I: yes

B: yeah so it's quite difficult to get into your uh like a be a friend with your uh um how do i say um i i don't know how to explain it but yeah it's like that uh even because i i tried it with my classmates because you know you are you are in a different environment you have to try it only then you can have a cultural exchange to you know what is different from your country and only if you have a conversation so for me it always existed in the classroom and even in classroom itself it was we didn't actually get time to have a good conversation with our German classmates and all yeah that that was something difficult for me but after all I felt it was really a good learning lesson yeah yeah that's that's i have to say

I: and and some some other research you did like for hobbies fitness studio some other interests

B: yeah when i compare to india like being a student in germany is the best thing that you can get in your life because um the fees the first thing is the fees that you are going to pay for your education here is very very very less literally you're not paying educate paying fees it's like administration or the travel expenses all that thing you're paying as fees uh that's one good thing and student discounts it's so much like you get so much of student discounts and i i feel like i i i was actually a fool who didn't use all the coupons that were received in my um that package the student the welcome bag yeah that i i later only i decided one thing is that everything is in german so you don't um you don't put enough time to read it or uh go through everything or translate so because i already have so much stuff in the university to do so if it's in english okay you will read it right this one you don't read that was one fault i did from my side because there was so much offers everywhere most of the libraries or museums and also it was really good then the student organization i should really really appreciate it because all of the student organizations are doing a lot of lot of good things so that you are supporting the students who are coming it's it's quite a welcoming approach to the students who are new to this place. That's what I feel.

I: Okay, nice. I have one more important question my professor told me to ask. So for all these steps you took, what was the situation where you used let me repeat again yeah in

what situation did you search for universities and for the health insurance and visa and stuff was it in the morning, evening, while traveling and what devices did you use so do you use your mobile phone, a laptop a desktop device

B: i mostly for all this uh time where i research something i always use my laptop because it's wider screen you don't have to zoom or zoom in so i always use laptop and mostly from morning to evening

I: um so you were not in in a rush some somewhere in between that's why i asked because while traveling on the mobile phones maybe not the the most convenient way to research such important topic

B: yeah so i i always kept the time to do that so yeah that's and the some things would be like if you want to call something it's not literally possible to do that because you know you're calling from india to germany and if you are doing with normal phone conversation it would be really costly the only thing that you can do is write mail and the time difference is also a like you have to if you're i didn't have such an experience but i heard some people had a desperate situation even for taking a visa appointment they have to sit in the midnight to get a slot to apply yeah that's that's something that's because of the time difference i think so nothing else

I: yeah that's true office times are not not not always the best ones

B: yeah yeah yeah that's what i think and uh mostly like uh moreover it like over a conclusion i feel like when you said about the application or the that uh helping material i feel everything in dresden is like provided into your hands it's there everywhere the only thing that you have to do that you have to do a little bit of research like i have few friends who have been repeatedly asking oh where can i take an appointment for a city registration these that and but it's clearly given in the landeshauptstadt of dresden page what you can do where you can get an appointment what you should take where all those things but i feel like some people don't put an effort to read it some people put yeah that's the only thing i feel then then the main thing is that the accommodation it's very difficult to get a feasible accommodation for students that's the only thing that I feel challenging at the moment

I: okay with an eye on the time one last question do you have any suggestions for improvement or some positive examples from your home country something that could make the process easier from your perspective?

B: In my experience, I don't think in general, I would say like some universities can take steps to reply to you whether your application is accepted or rejected. But that's nothing that like everyone can do. But it changes from universities to university, right? Otherwise, all the things that I have experienced is good but there are some people who say like some procedures or the reply that they get from the office like the ausländer office or some offices it's delaying like appointments are also delaying but so far I have felt everything is on time for me so I actually I don't have anything to say like that but yes but there are I had a classmate who came from Hamburg and he said to me, like for visa extension, uh, he didn't get an appointment until the end of his visa. Yeah. It, it happens. I think it happens in big cities like Munich, Hamburg, where people, there are more people. I think it was like that. Yeah.

I: Okay. Great. Um, we're already a little bit over the time. I don't want to steal some more of your time. I guess you're pretty busy as well.

B: Yeah.

I: So thank you so much for sharing your experience. I guess this was a very, very helpful interview. It will help me a lot. Yeah.

B: And I can also share the websites with you.

I: Yeah, this would be great. Yeah.

B: Yeah.

I: And I wish you the best for the upcoming semester. You're still studying, right?

B: Yeah, I'm still studying.

I: And when is your master thesis time?

B: It should be actually finishing in October, but I extend it for one more year.

I: Ah, okay. It's actually quite similar for me because of my exchange, I also have to do my master's thesis one semester later.

B: yeah yeah and i think sometimes like the courses are a little bit difficult to manage every course so you have to do your compulsory modules and electives later

I: yeah that's true yeah okay so i think

B: i i just uh cut my video because i don't have charging my laptop.

I: Oh, okay, yeah. No worries. Yeah. So I will probably write you again for some follow-up questions. There are always some gaps in between my interview guide and the topics we talked about.

B: Yeah, no problem.

I: It would be great if you sent me the website you use for the researching the university.

B: Sure, I will write to you.

I: Yeah, and then I wish you the best for the current semester and all the other semesters coming

B: and I wish you the same

I: so thanks for your help and bye bye
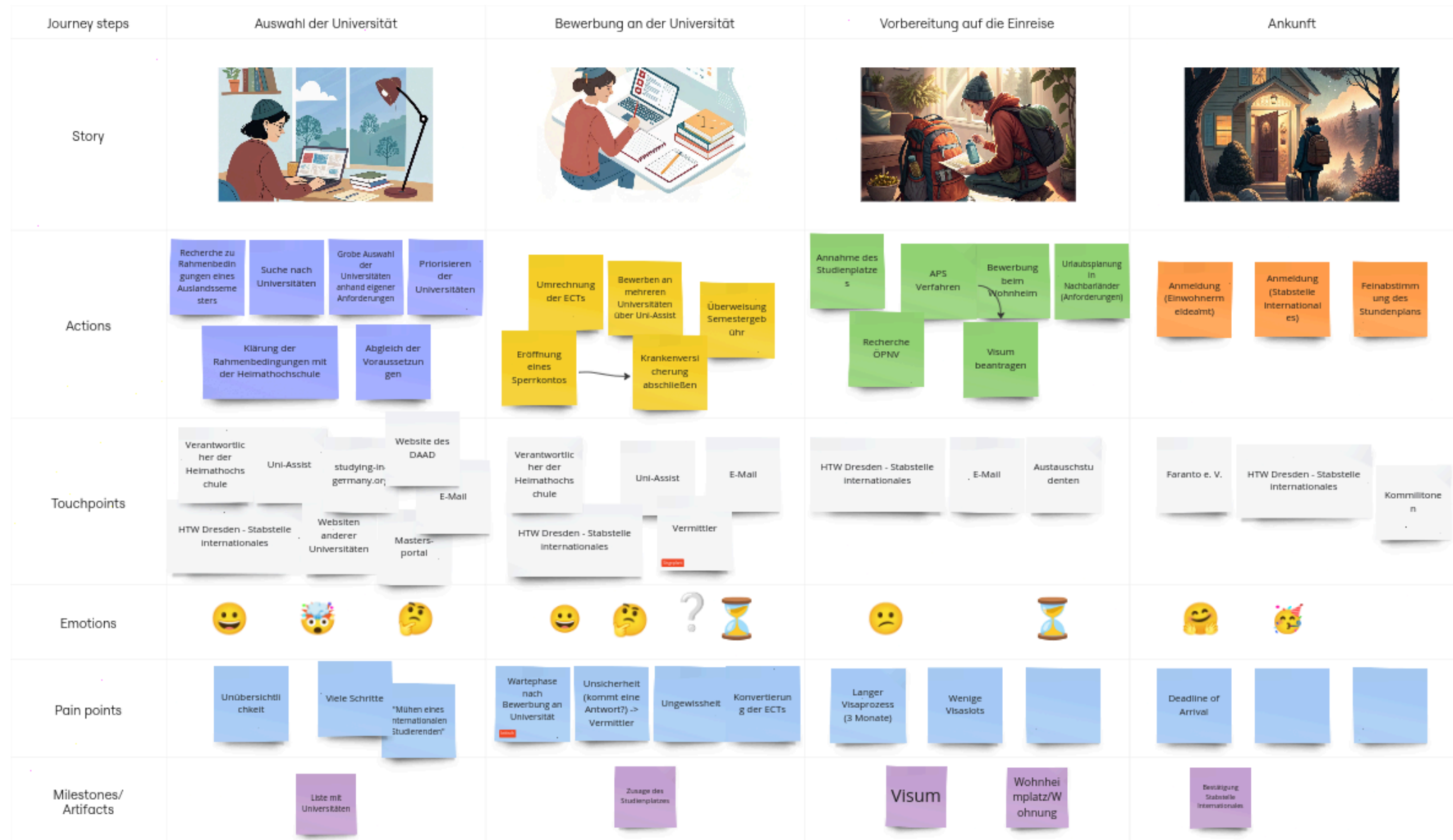
A.4 User Journey Map

Abbildung 7: User Journey Map der Austauschstudierenden

B Ergänzendes Material zur Analyse des Ideal-Prozesses

B.1 Prozesses in Mermaid Syntax

Kann zum Beispiel unter `https://mermaid.live/` gerendert werden.

```
flowchart TD
    doc_Proofofsecuredlivelihood["Document: Proof of secured livelihood"]
    doc_ResumeCV["Document: Resume/CV"]
    doc_Residencepermitapplication["Document: Residence permit application"]
            doc_Confirmationofpaymentoftheadministrativechargeattheimmigrationoffice["Document:
Confirmation of payment of the administrative charge at the immigration office"]
    doc_EnrolmentcertificatefromHTWDresden["Document: Enrolment certificate from HTW Dresden"]
    doc_SignedrequestforHTWlogin["Document: Signed request for HTW login"]
    doc_LetterofAdmission["Document: Letter of Admission"]
    doc_Residencepermitforstudypurposes["Document: Residence permit for study purposes"]
    doc_RentalAgreement["Document: Rental Agreement"]
    doc_Visaforstudypurposes["Document: Visa for study purposes"]
      doc_TranscriptofRecordsofyourhomeuniversity["Document: Transcript of Records of your home
university"]
      doc_ProofofHealthInsuranceRecognizedinGermany["Document: Proof of Health Insurance Recognized
in Germany"]
    doc_TranscriptofRecordsofHTWDresden["Document: Transcript of Records of HTW Dresden"]
    doc_RegistrationCertificateCitizensOfficeDresden["Document: Registration Certificate: Citizens'
Office Dresden"]
    doc_Residencypermitforacademicpurposes["Document: Residency permit for academic purposes"]
    doc_OnlineLearningAgreement["Document: (Online) Learning Agreement"]
    doc_Proofofavalidstudyvisa["Document: Proof of a valid study visa"]
    doc_PersonalHTWDLogin["Document: Personal HTWD Login"]
      doc_ConfirmationofpaymentoftheSemesterContribution["Document: Confirmation of payment of the
Semester Contribution"]
    doc_Proofoflanguageproficiency["Document: Proof of language proficiency"]
    doc_Germantaxidentificationnumber["Document: German tax identification number"]
    doc_Currentbiometricphoto["Document: Current biometric photo"]
    doc_Confirmationofpaymentoftheadministrativechargeforvisa["Document: Confirmation of payment of
the administrative charge for visa"]
    doc_Applicationforadmissiontostudies["Document: Application for admission to studies"]
    doc_CopyofpassportorID["Document: Copy of passport or ID"]
    step_ApplicationSubmission["Application Submission"]
    step_WaitforapplicationReview["Wait for application Review"]
    step_ResearchEnglishtaughtcourses["Research English taught courses"]
    step_Selectcourses["Select courses"]
    step_CreateLearningAgreement["Create Learning Agreement"]
    step_SubmitLearningAgreementforapproval["Submit Learning Agreement for approval"]
    step_Receiveapprovalconfirmation["Receive approval confirmation"]
    step_CheckAcademicCalendar["Check Academic Calendar"]
    step_AttendInformationSessions["Attend Information Sessions"]
    step_EnrollinLanguageCourse["Enroll in Language Course"]
    step_ObtainHealthInsurance["Obtain Health Insurance"]
    step_Applyforresidencepermit["Apply for residence permit"]
    step_Waitforresidencepermitapproval["Wait for residence permit approval"]
    step_Checkimmigrationformalities["Check immigration formalities"]
```

```
    step_Obtainpassport["Obtain passport"]
    step_Arrangeinsuranceandpermits["Arrange insurance and permits"]
    step_Applyforvisa["Apply for visa"]
    step_Waitforvisaapproval["Wait for visa approval"]
    step_Applyforresidencepermit["Apply for residence permit"]
    step_Registerforstudentresidence["Register for student residence"]
    step_Receiveadmissionletter["Receive admission letter"]
    step_PaySemesterContribution["Pay Semester Contribution"]
    step_EnrollatHTWDresden["Enroll at HTW Dresden"]
    step_Informationsessionontheorganisationofyourstudiesandtheselectionofyourcourses["Information
session on the organisation of your studies and the selection of your courses"]
    step_Makeanonlineappointment["Make an online appointment"]
    step_VisittheCitizensOffice["Visit the Citizens' Office"]
    step_Submitrequireddocuments["Submit required documents"]
    step_Makeanappointment["Make an appointment"]
    step_Submitapplicationanddocuments["Submit application and documents"]
    step_WaitforprocessingofImmigrationOffice["Wait for processing of Immigration Office"]
    step_OpenaGermanbankaccount["Open a German bank account"]
    step_CheckTimetable["Check Timetable"]
    step_PlanLectures["Plan Lectures"]
    step_EnterCourseCode["Enter Course Code"]
    step_GetIndividualTimetable["Get Individual Timetable"]
    step_RegisterforExams["Register for Exams"]
    step_GetExamDates["Get Exam Dates"]
    step_DeregisterfromExam["Deregister from Exam"]
    step_TakeExam["Take Exam"]
    step_Waitforgradestobereported["Wait for grades to be reported"]
    step_RequestTranscriptofRecords["Request Transcript of Records"]
    step_ConferwithhomeuniversityandAcademicCoordinator["Confer with home university and Academic
Coordinator"]
    step_Obtaintheformforprolongationofmatriculation["Obtain the form for prolongation of
matriculation"]
    step_Signtheform["Sign the form"]
    step_CompleteanewLearningAgreement["Complete a new Learning Agreement"]
    step_Handinthesignedprolongationofmatriculation["Hand in the signed prolongation of
matriculation"]
    step_Scheduleanappointmentforprolongationofstudyvisa["Schedule an appointment for prolongation
of study visa"]
    step_Extendstudyvisa["Extend study visa"]
    step_Reregisterforthenextsemester["Re-register for the next semester"]
    step_Nothing["Nothing"]
    step_CloseGermanbankaccount["Close German bank account"]
    step_Returnborrowedbooks["Return borrowed books"]
    step_DeregisterfromGermanHealthInsurance["Deregister from German Health Insurance"]
    step_DeregisterfromCitizensOfficeDresden["Deregister from Citizens' Office Dresden"]
    doc_Applicationforadmissiontostudies -- required --> step_ApplicationSubmission
    doc_OnlineLearningAgreement -- required --> step_ApplicationSubmission
    doc_ResumeCV -- required --> step_ApplicationSubmission
    doc_TranscriptofRecordsofyourhomeuniversity -- required --> step_ApplicationSubmission
    doc_Proofoflanguageproficiency -- required --> step_ApplicationSubmission
    doc_SignedrequestforHTWlogin -- required --> step_ApplicationSubmission
    doc_Currentbiometricphoto -- required --> step_ApplicationSubmission
    doc_CopyofpassportorID -- required --> step_ApplicationSubmission
```

```
doc_Proofofavalidstudyvisa -- required --> step_ApplicationSubmission
step_ApplicationSubmission --> step_WaitforapplicationReview
step_WaitforapplicationReview -- received --> doc_LetterofAdmission
step_ResearchEnglishtaughtcourses --> step_Selectcourses
step_Selectcourses --> step_CreateLearningAgreement
step_CreateLearningAgreement --> step_SubmitLearningAgreementforapproval
step_SubmitLearningAgreementforapproval --> step_Receiveapprovalconfirmation
step_Receiveapprovalconfirmation -- received --> doc_OnlineLearningAgreement
step_AttendInformationSessions --> step_EnrollinLanguageCourse
step_LetterofAdmission --> step_ObtainHealthInsurance
doc_CopyofpassportorID -- required --> step_ObtainHealthInsurance
doc_LetterofAdmission -- required --> step_ObtainHealthInsurance
step_ObtainHealthInsurance -- received --> doc_ProofofHealthInsuranceRecognizedinGermany
step_Applyforresidencepermit --> step_Waitforresidencepermitapproval
step_Waitforresidencepermitapproval -- received --> doc_Residencepermitforstudypurposes
step_Checkimmigrationformalities --> step_Obtainpassport
step_Obtainpassport -- received --> doc_CopyofpassportorID
doc_LetterofAdmission -- required --> step_Arrangeinsuranceandpermits
doc_CopyofpassportorID -- required --> step_Arrangeinsuranceandpermits
step_Arrangeinsuranceandpermits --> step_Applyforvisa
step_Applyforvisa --> step_Waitforvisaapproval
doc_Residencepermitforstudypurposes -- required --> step_Waitforvisaapproval
        doc_Confirmationofpaymentoftheadministrativechargeforvisa    --    required    -->
step_Waitforvisaapproval
doc_RentalAgreement -- required --> step_Waitforvisaapproval
doc_ProofofHealthInsuranceRecognizedinGermany -- required --> step_Waitforvisaapproval
doc_Proofofsecuredlivelihood -- required --> step_Waitforvisaapproval
doc_LetterofAdmission -- required --> step_Waitforvisaapproval
doc_Currentbiometricphoto -- required --> step_Waitforvisaapproval
doc_CopyofpassportorID -- required --> step_Waitforvisaapproval
step_Waitforvisaapproval -- received --> doc_Visaforstudypurposes
doc_LetterofAdmission -- required --> step_Registerforstudentresidence
step_Registerforstudentresidence --> step_Receiveadmissionletter
step_Receiveadmissionletter -- received --> doc_RentalAgreement
step_ObtainHealthInsurance --> step_EnrollatHTWDresden
step_Waitforvisaapproval --> step_EnrollatHTWDresden
doc_CopyofpassportorID -- required --> step_EnrollatHTWDresden
doc_Visaforstudypurposes -- required --> step_EnrollatHTWDresden
doc_ProofofHealthInsuranceRecognizedinGermany -- required --> step_EnrollatHTWDresden
doc_ConfirmationofpaymentoftheSemesterContribution -- required --> step_EnrollatHTWDresden
step_EnrollatHTWDresden -- received --> doc_PersonalHTWDLogin
step_EnrollatHTWDresden -- received --> doc_Proofofavalidstudyvisa
step_EnrollatHTWDresden -- received --> doc_EnrolmentcertificatefromHTWDresden
                                        step_EnrollatHTWDresden              --
> step_Informationsessionontheorganisationofyourstudiesandtheselectionofyourcourses
step_Makeanonlineappointment --> step_VisittheCitizensOffice
step_VisittheCitizensOffice --> step_Submitrequireddocuments
step_Submitrequireddocuments -- received --> doc_RegistrationCertificateCitizensOfficeDresden
step_Makeanappointment --> step_Submitapplicationanddocuments
doc_Residencepermitapplication -- required --> step_Submitapplicationanddocuments
    doc_Confirmationofpaymentoftheadministrativechargeattheimmigrationoffice    --    required    -->
step_Submitapplicationanddocuments
doc_RentalAgreement -- required --> step_Submitapplicationanddocuments
```

```
        doc_ProofofHealthInsuranceRecognizedinGermany -- required --> step_Submitapplicationanddocuments
        doc_Proofofsecuredlivelihood -- required --> step_Submitapplicationanddocuments
        doc_LetterofAdmission -- required --> step_Submitapplicationanddocuments
        doc_Currentbiometricphoto -- required --> step_Submitapplicationanddocuments
        doc_CopyofpassportorID -- required --> step_Submitapplicationanddocuments
        doc_Visaforstudypurposes -- required --> step_Submitapplicationanddocuments
        step_Submitapplicationanddocuments --> step_WaitforprocessingofImmigrationOffice
        step_WaitforprocessingofImmigrationOffice -- received --> doc_Residencypermitforacademicpurposes
        doc_CopyofpassportorID -- required --> step_OpenaGermanbankaccount
        doc_RegistrationCertificateCitizensOfficeDresden -- required --> step_OpenaGermanbankaccount
        doc_Germantaxidentificationnumber -- required --> step_OpenaGermanbankaccount
        doc_EnrolmentcertificatefromHTWDresden -- required --> step_OpenaGermanbankaccount
        step_CheckTimetable --> step_PlanLectures
        step_PlanLectures --> step_EnterCourseCode
        step_EnterCourseCode --> step_GetIndividualTimetable
        step_RegisterforExams --> step_GetExamDates
        step_GetExamDates --> step_DeregisterfromExam
        step_DeregisterfromExam --> step_TakeExam
        step_TakeExam --> step_Waitforgradestobereported
        step_Waitforgradestobereported --> step_RequestTranscriptofRecords
        step_RequestTranscriptofRecords -- received --> doc_TranscriptofRecordsofHTWDresden
                                    step_ConferwithhomeuniversityandAcademicCoordinator         -->
step_Obtaintheformforprolongationofmatriculation
        step_Obtaintheformforprolongationofmatriculation --> step_Signtheform
        step_Signtheform --> step_CompleteanewLearningAgreement
        step_CompleteanewLearningAgreement --> step_Handinthesignedprolongationofmatriculation
                                        step_Handinthesignedprolongationofmatriculation        --
> step_Scheduleanappointmentforprolongationofstudyvisa
        step_Scheduleanappointmentforprolongationofstudyvisa --> step_Extendstudyvisa
        step_Extendstudyvisa --> step_Reregisterforthenextsemester
        step_CloseGermanbankaccount --> step_Returnborrowedbooks
        step_Returnborrowedbooks --> step_DeregisterfromGermanHealthInsurance
        step_DeregisterfromGermanHealthInsurance --> step_DeregisterfromCitizensOfficeDresden
        %% Styling
        classDef document fill:#006680,stroke:#333,stroke-width:1px
eDresden,doc_Residencypermitforacademicpurposes,doc_OnlineLearningAgreement,doc_Proofofavalidstudyvisa,doc_PersonalHTWDLogin,doc_Confirmat
        document
```

B.2 Prozess in JSON-Struktur

```json
{
  "meta": {
    "date": "2025-01-01T19:24:11.110408+00:00",
    "website": "https://www.htw-dresden.de/en/international/coming-to-htwd/exchange-programmes"
  },
  "phases": [
    {
      "name": "Application and admission procedures",
      "steps": [
        {
          "name": "Application Submission",
          "description": "Submit application documents to HTW Dresden",
```

```json
        "required_steps": [],
        "next_steps": [
          "Wait for application Review"
        ],
        "deadline": "15 June for winter semester and 15 November for summer semester",
        "required_documents": [
          {
            "name": "Application for admission to studies",
            "description": "Signed by you and your home university coordinator"
          },
          {
            "name": "(Online) Learning Agreement",
            "description": "Your course selection approved and signed by your and your home
university coordinator"
          },
          {
            "name": "Resume/CV",
            "description": "In English or German"
          },
          {
            "name": "Transcript of Records of your home university",
            "description": "Overview of your grades, issued by your home university, in English
or German"
          },
          {
            "name": "Proof of language proficiency",
            "description": "Proof the language you will be studying in, English and/or German at
level B1/B2"
          },
          {
            "name": "Signed request for HTW login",
            "description": "The document will be sent to you via email"
          },
          {
            "name": "Current biometric photo",
            "description": "Not older than 6 months"
          },
          {
            "name": "Copy of passport or ID",
            "description": null
          },
          {
            "name": "Proof of a valid study visa",
            "description": "Can be submitted later upon entry"
          }
        ],
        "received_documents": []
      },
      {
        "name": "Wait for application Review",
        "description": "Wait for reviewing of application documents by HTW Dresden",
        "required_steps": [
          "Application Submission"
```

```
        ],
        "next_steps": [
          "Apply for visa",
          "Register for student residence",
          "Obtain Health Insurance"
        ],
        "deadline": null,
        "required_documents": [],
        "received_documents": [
          {
            "name": "Letter of Admission",
            "description": "Official Letter of Admission"
          }
        ]
      }
    ]
  },
  {
    "name": "Learning Agreement / study schedule / Course selection",
    "steps": [
      {
        "name": "Research English taught courses",
        "description": "Browse the HTW Dresden website for English taught courses",
        "required_steps": [],
        "next_steps": [
          "Select courses"
        ],
        "deadline": null,
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Select courses",
        "description": "Choose desired English taught courses",
        "required_steps": [
          "Research English taught courses"
        ],
        "next_steps": [
          "Create Learning Agreement"
        ],
        "deadline": "End of registration period",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Create Learning Agreement",
        "description": "Fill out the Learning Agreement digitally via https://learning-agreement.
eu or use the template for non-Erasmus+ students.",
        "required_steps": [
          "Select courses"
        ],
        "next_steps": [
          "Submit Learning Agreement for approval"
```

```json
        ],
        "deadline": "Before the start of the academic year",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Submit Learning Agreement for approval",
        "description": "Submit the Learning Agreement to your home university and HTWD for approval.",
        "required_steps": [
          "Create Learning Agreement"
        ],
        "next_steps": [
          "Receive approval confirmation"
        ],
        "deadline": "Before the start of the academic year",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Receive approval confirmation",
        "description": "Get confirmation that your Learning Agreement has been approved by your home university and HTWD.",
        "required_steps": [
          "Submit Learning Agreement for approval"
        ],
        "next_steps": [
          "Create study schedule"
        ],
        "deadline": "Before the start of the academic year",
        "required_documents": [],
        "received_documents": [
          {
            "name": "(Online) Learning Agreement",
            "description": "Your course selection approved and signed by your and your home university coordinator"
          }
        ]
      }
    ]
  },
  {
    "name": "Semester dates / Academic calendar",
    "steps": [
      {
        "name": "Check Academic Calendar",
        "description": "Students check the academic calendar for the upcoming semester.",
        "required_steps": [],
        "next_steps": [
          "TBD"
        ],
        "deadline": null,
        "required_documents": [],
        "received_documents": []
```

```json
        }
      ]
    },
    {
      "name": "Language courses",
      "steps": [
        {
          "name": "Attend Information Sessions",
          "description": "Attend the information sessions during the Welcome Week.",
          "required_steps": [],
          "next_steps": [
            "Enroll in Language Course"
          ],
          "deadline": "Welcome Week",
          "required_documents": [],
          "received_documents": []
        },
        {
          "name": "Enroll in Language Course",
          "description": "Enroll in the language course of your choice.",
          "required_steps": [
            "Attend Information Sessions"
          ],
          "next_steps": [
            "Start Language Course"
          ],
          "deadline": "End of Welcome Week",
          "required_documents": [],
          "received_documents": []
        }
      ]
    },
    {
      "name": "Health Insurance",
      "steps": [
        {
          "name": "Obtain Health Insurance",
          "description": "Students from outside EU or EEA countries must take out a German
health insurance.",
          "required_steps": [
            "Letter of Admission"
          ],
          "next_steps": [
            "Enroll at HTW Dresden"
          ],
          "deadline": "Before arriving in Dresden",
          "required_documents": [
            {
              "name": "Copy of passport or ID",
              "description": "Valid passport required for health insurance application"
            },
            {
              "name": "Letter of Admission",
```

```
              "description": "Official Letter of Admission"
          }
        ],
        "received_documents": [
          {
              "name": "Proof of Health Insurance Recognized in Germany",
              "description": "Proof of Health Insurance Recognized in Germany required for enrollment"
          }
        ],
        "required_by": [
            "Students except when from European Union or EEA countries, Switzerland, Bosnia and
Herzegovina, Montenegro, North Macedonia, Serbia, Turkey, Tunisia or the United Kingdom"
        ]
      }
    ]
  },
  {
    "name": "Residence permit for study purposes to apply for visa",
    "steps": [
      {
        "name": "Apply for residence permit",
        "description": "Apply for a residence permit for study purposes see: https://www.bamf.
de/EN/Themen/MigrationAufenthalt/ZuwandererDrittstaaten/MobilitaetEU/MobilitaetStudent/mobilitaet-
student-node.html;jsessionid=0B177C50DD5B17BFE9B34D95459902F3.internet282",
        "required_steps": [],
        "next_steps": [
          "Wait for residence permit approval"
        ],
        "deadline": "Before leaving your home country",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Wait for residence permit approval",
        "description": "Wait for the residence permit approval from the German embassy.",
        "required_steps": [
          "Apply for residence permit"
        ],
        "next_steps": [
          "Apply for visa"
        ],
        "deadline": null,
        "required_documents": [],
        "received_documents": [
          {
            "name": "Residence permit for study purposes",
            "description": "Official residence permit for study purposes"
          }
        ]
      }
    ]
  },
  {
```

```
      "name": "Visa",
      "steps": [
        {
          "name": "Check immigration formalities",
            "description": "Check the immigration formalities available from the Federal Foreign
Office and the German missions in your home country.",
          "required_steps": [],
          "next_steps": [
            "Obtain passport",
            "Arrange insurance and permits"
          ],
          "deadline": "Before leaving your home country",
          "required_documents": [],
          "received_documents": []
        },
        {
          "name": "Obtain passport",
          "description": "Obtain a passport if you don't have one.",
          "required_steps": [
            "Check immigration formalities"
          ],
          "next_steps": [
            "Arrange insurance and permits"
          ],
          "deadline": "Before leaving your home country",
          "required_documents": [],
          "received_documents": [
            {
              "name": "Copy of passport or ID",
              "description": null
            }
          ]
        },
        {
          "name": "Arrange insurance and permits",
            "description": "Arrange insurance and the necessary permits before leaving your
home country.",
          "required_steps": [
          ],
          "next_steps": [
            "Apply for visa"
          ],
          "deadline": "Before leaving your home country",
          "required_documents": [
            {
              "name": "Letter of Admission",
              "description": "Official Letter of Admission"
            },
            {
              "name": "Copy of passport or ID",
              "description": null
            }
          ],
```

```
          "received_documents": []
        },
        {
          "name": "Apply for visa",
           "description": "Apply for a student visa at the German embassy in your home country if
you are a non-EU citizen and plan to stay in Germany for more than three months.",
          "required_steps": [
            "Arrange insurance and permits"
          ],
          "next_steps": [
            "Wait for visa approval"
          ],
          "deadline": "Several weeks/month before your planned departure",
          "required_documents": [],
          "received_documents": []
        },
        {
          "name": "Wait for visa approval",
          "description": "Wait for the visa approval from the German embassy.",
          "required_steps": [
            "Apply for visa"
          ],
          "next_steps": [
            "Enroll at HTW Dresden"
          ],
          "deadline": "Before Arrival",
          "required_documents": [
            {
              "name": "Residence permit for study purposes",
              "description": "Must be valid for the entire duration of stay in Germany."
            },
            {
              "name": "Confirmation of payment of the administrative charge for visa",
              "description": "110 EUR in cash or ec-cash"
            },
            {
              "name": "Rental Agreement",
              "description": "Original and Copy"
            },
            {
              "name": "Proof of Health Insurance Recognized in Germany",
              "description": "Original and copy"
            },
            {
              "name": "Proof of secured livelihood",
              "description": "For example scholarship or private savings"
            },
            {
              "name": "Letter of Admission",
              "description": "Enrollment or admission letter of HTW Dresden, with copy"
            },
            {
              "name": "Current biometric photo",
```

```json
              "description": "Not older than 6 months"
            },
            {
              "name": "Copy of passport or ID",
              "description": null
            }
          ],
          "received_documents": [
            {
              "name": "Visa for study purposes",
              "description": "Official visa for study purposes"
            }
          ]
        }
      ],
      "required_by": [
          "Students from all countries except USA, Australia, Israel, Japan, Canada, Korea, New
Zealand, Switzerland"
      ]
    },
    {
      "name": "Acquire residence permit for study purposes instead of visa",
        "description": "Exchange students from these countries only need a residence permit for
study purposes.",
      "steps": [
        {
          "name": "Apply for residence permit",
           "description": "You have to apply for this residence permit at the Dresden Immigration
Office.",
          "deadline": "within three months after entry in Germany",
          "required_documents": [],
          "received_documents": []
        }
      ],
      "required_by": [
          "Andorra, Australia, Brazil, El Salvador, Great Britain and Honduras, Iceland, Israel,
Japan, Canada, the Republic of Korea, Liechtenstein, Monaco, New Zealand, Northern Ireland, Norway,
San Marino, Switzerland and the USA"
      ],
      "received_documents": [
        {
          "name": "Residence permit for study purposes",
          "description": "Official residence permit for study purposes"
        }
      ]
    },
    {
      "name": "Accommodation",
      "steps": [
        {
          "name": "Register for student residence",
          "description": "Use the online application procedure to register for a student residence.",
          "required_steps": [             ],
```

```json
      "next_steps": [
        "Receive admission letter"
      ],
      "deadline": "Not specified",
      "required_documents": [
        {
          "name": "Letter of Admission",
          "description": "Official Letter of Admission"
        }
      ],
      "received_documents": []
    },
    {
      "name": "Receive admission letter",
      "description": "Receive admission letter for student residence",
      "required_steps": [
        "Register for student residence"
      ],
      "next_steps": [],
      "deadline": "Not specified",
      "required_documents": [],
      "received_documents": [
        {
          "name": "Rental Agreement",
          "description": "Original and Copy"
        }
      ]
    }
  ]
},
{
  "name": "Semester contribution / living expenses",
  "steps": [
    {
      "name": "Pay Semester Contribution",
      "description": "Exchange students need to pay the semester contribution by bank transfer
from their home country before entering the country.",
      "required_steps": [],
      "next_steps": [
        "Receive HTW student card and HTW-Login"
      ],
      "deadline": "Before entering the country",
      "required_documents": [],
      "received_documents": []
    }
  ]
},
{
  "name": "Arrival",
  "steps": [],
  "required_documents": [],
  "received_documents": []
},
```

```json
{
  "name": "Welcome Week and Buddy Programme",
  "steps": [
    {
      "name": "Enroll at HTW Dresden",
      "description": "Enrol at the International Office",
      "required_steps": [
        "Obtain Health Insurance",
        "Wait for visa approval"
      ],
      "next_steps": [
        "Information session on the organisation of your studies and the selection of your courses"
      ],
      "deadline": "During the Welcome Week",
      "required_documents": [
        {
          "name": "Copy of passport or ID",
          "description": null
        },
        {
          "name": "Visa for study purposes",
          "description": "Official visa for study purposes"
        },
        {
          "name": "Proof of Health Insurance Recognized in Germany",
          "description": "Proof of Health Insurance Recognized in Germany"
        },
        {
          "name": "Confirmation of payment of the Semester Contribution",
          "description": "Proof of payment of the semester contribution"
        }
      ],
      "received_documents": [
        {
          "name": "Personal HTWD Login",
          "description": "Personal login credentials for HTWD systems"
        },
        {
          "name": "Proof of a valid study visa",
          "description": "Proof of a valid study visa required for enrollment"
        },
        {
          "name": "Enrolment certificate from HTW Dresden",
          "description": null
        }
      ]
    },
    {
      "name": "Information session on the organisation of your studies and the selection of your courses",
      "description": "Attend the information session on the organisation of your studies and the selection of your courses.",
      "required_steps": [
```

```
            "Enroll at HTW Dresden"
        ],
        "next_steps": [
        ],
        "deadline": "During the Welcome Week",
        "required_documents": [],
        "received_documents": []
      }
    ]
  },
  {
    "name": "Registration at the Citizens' Office Dresden",
    "steps": [
      {
        "name": "Make an online appointment",
        "description": "Book an appointment at the Citizens' Office Dresden",
        "required_steps": [],
        "next_steps": [
          "Visit the Citizens' Office"
        ],
        "deadline": "Not applicable",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Visit the Citizens' Office",
        "description": "Register at the local Citizens' Office Dresden",
        "required_steps": [
          "Make an online appointment"
        ],
        "next_steps": [
          "Submit required documents"
        ],
        "deadline": "Within two weeks if staying longer than 3 months",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Submit required documents",
        "description": "Provide passport, identification card, rental contract, and Landlord's
certificate/housing confirmation",
        "required_steps": [
          "Visit the Citizens' Office"
        ],
        "next_steps": [
          "Complete registration"
        ],
        "deadline": "At the time of registration",
        "required_documents": [],
        "received_documents": [
          {
            "name": "Registration Certificate: Citizens' Office Dresden",
            "description": "Registration Certificate from the Citizens' Office Dresden"
```

```
          }
        ]
      }
    ]
  },
  {
    "name": "Registration at the Immigration Office (\"Ausländerbehörde\")",
    "steps": [
      {
        "name": "Make an appointment",
        "description": "Send required information to the Immigration Office Dresden to Schedule
an appointment for prolongation of study visa.",
        "required_steps": [],
        "next_steps": [
          "Submit application and documents"
        ],
        "deadline": "Before visiting the office",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Submit application and documents",
        "description": "Hand in the residence permit application and required documents at the
Immigration Authority.",
        "required_steps": [
          "Make an appointment"
        ],
        "next_steps": [
          "Wait for processing of Immigration Office"
        ],
        "deadline": "Within the first three months after entering Germany",
        "required_documents": [
          {
            "name": "Residence permit application",
            "description": "Fully completed application form."
          },
          {
            "name": "Confirmation of payment of the administrative charge at the immigration office",
            "description": "110 EUR in cash or ec-cash"
          },
          {
            "name": "Rental Agreement",
            "description": "Original and Copy"
          },
          {
            "name": "Proof of Health Insurance Recognized in Germany",
            "description": "Original and copy"
          },
          {
            "name": "Proof of secured livelihood",
            "description": "For example scholarship or private savings"
          },
          {
```

```
          "name": "Letter of Admission",
          "description": "Enrollment or admission letter of HTW Dresden, with copy"
        },
        {
          "name": "Current biometric photo",
          "description": "Not older than 6 months"
        },
        {
          "name": "Copy of passport or ID",
          "description": null
        },
        {
          "name": "Visa for study purposes",
          "description": "Official visa for study purposes"
        }
      ],
      "received_documents": []
    },
    {
      "name": "Wait for processing of Immigration Office",
      "description": "Wait till you get a response",
      "required_steps": [
        "Submit application and documents"
      ],
      "next_steps": [],
      "deadline": null,
      "required_documents": [],
      "received_documents": [
        {
          "name": "Residency permit for academic purposes",
          "description": "Residency permit for academic purposes"
        }
      ]
    }
  ],
  "required_by": "Non-EU citizens"
},
{
  "name": "Bank account",
  "steps": [
    {
      "name": "Open a German bank account",
      "description": "Students need to open a German bank account to debit the rent.",
      "required_steps": [
      ],
      "next_steps": [
        "Receive a debit card and cash card"
      ],
      "deadline": null,
      "required_documents": [
        {
          "name": "Copy of passport or ID",
          "description": null
```

```
        },
        {
          "name": "Registration Certificate: Citizens' Office Dresden",
          "description": "Registration Certificate from the Citizens' Office Dresden"
        },
        {
          "name": "German tax identification number",
          "description": null
        },
        {
          "name": "Enrolment certificate from HTW Dresden",
          "description": null
        }
      ],
      "received_documents": []
    }
  ]
},
{
  "name": "Timetable / start of the lecture period",
  "steps": [
    {
      "name": "Check Timetable",
      "description": "Check the published timetable for the semester",
      "required_steps": [],
      "next_steps": [
        "Plan Lectures"
      ],
      "deadline": "Beginning of March for summer semester, mid September for winter semester",
      "required_documents": [],
      "received_documents": []
    },
    {
      "name": "Plan Lectures",
      "description": "Plan your lectures schedule",
      "required_steps": [
        "Check Timetable"
      ],
      "next_steps": [
        "Enter Course Code"
      ],
      "deadline": "Before the start of the semester",
      "required_documents": [],
      "received_documents": []
    },
    {
      "name": "Enter Course Code",
      "description": "Enter your course code for additional courses",
      "required_steps": [
        "Plan Lectures"
      ],
      "next_steps": [
        "Get Individual Timetable"
```

```
        ],
        "deadline": "Before the start of the semester",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Get Individual Timetable",
        "description": "Get your individual timetable for the semester",
        "required_steps": [
          "Enter Course Code"
        ],
        "next_steps": [],
        "deadline": "Before the start of the semester",
        "required_documents": [],
        "received_documents": []
      }
    ]
  },
  {
    "name": "Examinations",
    "steps": [
      {
        "name": "Register for Exams",
        "description": "Send current learning agreement to International Office",
        "required_steps": [],
        "next_steps": [
          "Get Exam Dates"
        ],
        "deadline": "Registration period",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Get Exam Dates",
        "description": "Check for published examination dates",
        "required_steps": [
          "Register for Exams"
        ],
        "next_steps": [
          "Deregister from Exam"
        ],
        "deadline": "One month before the start of the respective examination section",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Deregister from Exam",
        "description": "Withdraw from an examination up to one week before the examination",
        "required_steps": [
          "Get Exam Dates"
        ],
        "next_steps": [
          "Take Exam"
```

```json
            ],
            "deadline": "One week before the examination",
            "required_documents": [],
            "received_documents": []
          },
          {
            "name": "Take Exam",
            "description": "Take the exam.",
            "required_steps": [
              "Deregister from Exam"
            ],
            "next_steps": [
              "Wait for grades to be reported"
            ],
            "deadline": "As scheduled",
            "required_documents": [],
            "received_documents": []
          }
        ]
      },
      {
        "name": "Transcript of Records",
        "steps": [
          {
            "name": "Wait for grades to be reported",
            "description": "Wait for all grades to be reported by professors/lecturers to the
Examination Office.",
            "required_steps": [
              "Take Exam"
            ],
            "next_steps": [
              "Request Transcript of Records"
            ],
            "deadline": "4 weeks after the official end of the examination period",
            "required_documents": [],
            "received_documents": []
          },
          {
            "name": "Request Transcript of Records",
            "description": "Contact the Examination Office to request the Transcript of Records after
waiting for 4 weeks.",
            "required_steps": [
              "Wait for grades to be reported"
            ],
            "next_steps": [],
            "deadline": null,
            "required_documents": [],
            "received_documents": [
              {
                "name": "Transcript of Records of HTW Dresden",
                "description": "Official transcript of records from HTW Dresden"
              }
            ]
```

```
      }
    ]
  },
  {
    "name": "Prolongation of matriculation at HTWD",
    "steps": [
      {
        "name": "Confer with home university and Academic Coordinator",
        "description": "Discuss the prolongation of matriculation with home university and
Academic Coordinator",
        "required_steps": [],
        "next_steps": [
          "Obtain the form for prolongation of matriculation"
        ],
        "deadline": null,
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Obtain the form for prolongation of matriculation",
        "description": "Get the form from the Academic Coordinator",
        "required_steps": [
          "Confer with home university and Academic Coordinator"
        ],
        "next_steps": [
          "Sign the form"
        ],
        "deadline": null,
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Sign the form",
        "description": "Sign the form along with your home university and Academic Coordinator",
        "required_steps": [
          "Obtain the form for prolongation of matriculation"
        ],
        "next_steps": [
          "Complete a new Learning Agreement"
        ],
        "deadline": null,
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Complete a new Learning Agreement",
        "description": "Finish a new Learning Agreement",
        "required_steps": [
          "Sign the form"
        ],
        "next_steps": [
          "Hand in the signed prolongation of matriculation"
        ],
```

```json
        "deadline": null,
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Hand in the signed prolongation of matriculation",
        "description": "Submit the signed form at the International Office",
        "required_steps": [
          "Complete a new Learning Agreement"
        ],
        "next_steps": [
          "Get a letter of admission for the following semester",
          "Prolongation of study visa"
        ],
        "deadline": null,
        "required_documents": [],
        "received_documents": []
      }
    ]
  },
  {
    "name": "Prolongation of study visa",
    "steps": [
      {
        "name": "Schedule an appointment for prolongation of study visa",
        "description": "Schedule an appointment for prolongation of study visa with the Immigration
Office to extend the study visa.",
        "required_steps": [
          "Hand in the signed prolongation of matriculation"
        ],
        "next_steps": [
          "Extend study visa"
        ],
        "deadline": "Before the current visa expires",
        "required_documents": [],
        "received_documents": []
      },
      {
        "name": "Extend study visa",
        "description": "Extend the study visa at the Immigration Office.",
        "required_steps": [
          "Schedule an appointment for prolongation of study visa"
        ],
        "next_steps": [
          "Re-registration for the next semester"
        ],
        "deadline": "Before the current visa expires",
        "required_documents": [],
        "received_documents": []
      }
    ]
  },
  {
```

```
      "name": "Re-registration for the next semester",
      "steps": [
        {
          "name": "Re-register for the next semester",
          "description": "Pay the semester contribution and update the student ID card",
          "required_steps": [
            "Extend study visa"
          ],
          "next_steps": [
            "Update student ID card"
          ],
          "deadline": "End of re-registration period",
          "required_documents": [],
          "received_documents": []
        }
      ]
    },
    {
      "name": "Exmatriculation",
      "steps": [
        {
          "name": "Nothing",
          "description": "As an exchange student you will automatically be exmatriculated at the
end of the semester. You don't have to do anything.",
          "required_steps": [],
          "next_steps": [],
          "deadline": null,
          "required_documents": [],
          "received_documents": []
        }
      ]
    },
    {
      "name": "Deregistration",
      "steps": [
        {
          "name": "Close German bank account",
          "description": "Close your German bank account if you have one.",
          "required_steps": [],
          "next_steps": [
            "Return borrowed books",
            "Deregister from German Health Insurance",
            "Deregister from Citizens' Office Dresden"
          ],
          "deadline": "Before departure",
          "required_documents": [],
          "received_documents": []
        },
        {
          "name": "Return borrowed books",
          "description": "Return any books you have borrowed to the university library.",
          "required_steps": [
            "Close German bank account"
```

```
      ],
      "next_steps": [
        "Deregister from German Health Insurance",
        "Deregister from Citizens' Office Dresden"
      ],
      "deadline": "Before departure",
      "required_documents": [],
      "received_documents": []
    },
    {
      "name": "Deregister from German Health Insurance",
        "description": "Deregister from the German Health Insurance with the deregistration
certificate from HTW Dresden and the deregistration certificate from the Bürgerbüro (Resident
Registration Office Dresden).",
      "required_steps": [
        "Return borrowed books"
      ],
      "next_steps": [
        "Deregister from Citizens' Office Dresden"
      ],
      "deadline": "Before departure",
      "required_documents": [],
      "received_documents": []
    },
    {
      "name": "Deregister from Citizens' Office Dresden",
      "description": "De-register from the Citizens' Office Dresden.",
      "required_steps": [
        "Deregister from German Health Insurance"
      ],
      "next_steps": [],
      "deadline": "Within two weeks after moving out",
      "required_documents": [],
      "received_documents": []
    }
    ]
  }
  ],
  "documents": []
}
```

C Ergänzendes Material zum Prototypen

C.1 Vollständige Featureliste mit Priorität

Tabelle 1: Featureliste mit Priorität und Nutzergruppen

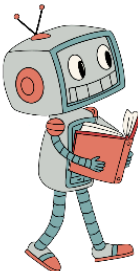| Priorität	Beschreibung	Nutzergruppe
1	**Personalisierung** der Anwendung anhand der individuellen Situation der Studierdenen	Alle Austauschstudenten
1	**Statusindikator** ob es in der aktuellen Situation zeitlich möglich ist, das Semester pünktlich zu starten	Alle Austauschstudenten
1	**Dokumenten-Checkliste** mit Deadlines für Visa, Krankenversicherung, Meldebescheinigung etc.	Alle Austauschstudenten
1	**Erinnerung an Deadlines** um wichtige Termine nicht zu verpassen	Alle Austauschstudenten
1	**Mehrsprachige Unterstützung**, mindestens in Englisch und Deutsch, für sprachliche Barrieren.	Alle Austauschstudenten
1	**Schritt-für-Schritt-Anleitungen** für Visum, Anmeldung, Aufenthaltserlaubnis und andere Prozesse.	Alle Austauschstudenten
1	**Notfallkontakte** wie Polizei, Krankenwagen und Botschaften.	Alle Austauschstudenten
1	**Erasmus-spezifische Informationen** zu Programmen und Schritten.	Erasmus-Studenten
1	**Informationen zum Visumprozess** mit allen wichtigen Dokumenten	Nicht EU Austauschstudenten
1	**Informationen zur Krankenversicherung**, mit Vergleich gesetzlicher und privater Optionen.	Nicht EU Austauschstudenten
1	**Rechner zum Konvertieren von ECTs** um zu prüfen, ob die Anforderungen an den Universitäten erfüllt werden.	Nicht EU Austauschstudenten
1	**Informationen zum Sperrkonto**	Nicht EU Austauschstudenten
2	**Informationen zu Kultur und Orientierung** bspw. Funktionsweise ÖPNV, Unterschiede der Kultur.	Alle Austauschstudenten

Priorität	Beschreibung	Nutzergruppe
2	**Integration von studentischen Hilfsorganisationen** mit Kontaktdaten und Angeboten.	Alle Austauschstudenten
2	**Seriöse Links zu Wohnungsportalen** zur sicheren Unterkunftssuche.	Alle Austauschstudenten
3	**Dokumentenübersetzung** für behördliche Kommunikation.	Alle Austauschstudenten
3	**Feedback-Funktion und Analytiks** für Verbesserungsvorschläge und Problemberichte zu den jeweiligen Prozessen (kontinuierliche Verbesserung). Die Erfassung realer Nutzungsdaten ermöglicht eine Optimierung der administrativen Abläufe durch bessere Ressourcennutzung.	Alle Austauschstudenten
3	**Kostenrechner** zur Planung von Semestergebühren, Miete, Versicherungen und anderen Ausgaben.	Finanzbewusste Studenten
3	**Anpassung des Unterstützungsgrads** damit Studierende mit unterschiedlichem Vorwissen individuell zugeschnittene Hilfestellungen erhalten.	Alle Austauschstudenten
3	**Terminbuchungsfunktion** für Behörden wie Einwohnermeldeamt und Ausländerbehörde.	Alle Austauschstudenten
3	**Vernetzungsfunktionen**, wie Foren oder Chatgruppen für Austauschstudenten.	Kommunikationsfreudige Studenten
4	**Integration von Behörden-APIs**, um Antragsstatus und Bearbeitungszeiten abzurufen.	Alle Austauschstudenten
5	**Informationen zu Karriere und Teilzeitjobs** inklusive Unterstützung bei der Arbeitserlaubnis.	Studenten, die arbeiten möchten oder Geld brauchen
5	**Reduzierung von Papierkram** durch digitale Dokumenteneinreichung und Verwaltung.	Alle Austauschstudenten

- **Priorität 1**: Unmittelbar wichtige Features, die bürokratische Prozesse und sprachliche Barrieren reduzieren.

- **Priorität 2**: Features zur Verbesserung der Planung und Sicherheit, z. B. Kosten und Unterkunft.

- **Priorität 3**: Soziale und berufliche Integration sowie Feedbackmöglichkeiten.

- **Priorität 4**: Erweiterte Funktionen zur Automatisierung und spezifische Programme.

- **Priorität 5**: Zusatzfunktionen zur Optimierung des Benutzererlebnisses.

C.2 Darstellung des Prototyp

C.2.1 Erfassung der Lebenslage

Abbildung 8: Prototyp - Darstellung Erfassung der Lebenslage

C.2.2 Dashboard

Dashboard

Vor dem Aufenthalt

Bei der Ankunft

Du liegst gut in der Zeit. Weiter so!

Noch 93 Tage bis zur Ankunft in Dresden.

Deine abgeschlossene Schritte

Deine Dokumente

	Titel	Beschreibung	Gültigkeitsda…
	Online Learnin…	Kursauswahl	/
	Reisepass	Der Reisepass…	12.08.2027
	Krankenversic…	Bestätigung de…	06.2026

Deine nächsten Schritte

	Titel	Beschreibung	Deadline

Warte auf deine Studienzulassung
Ohne die Studienzulassung kannst du aktuell keine weiteren Schritte durchführen. (vorauss. Dauer 12 Tage)
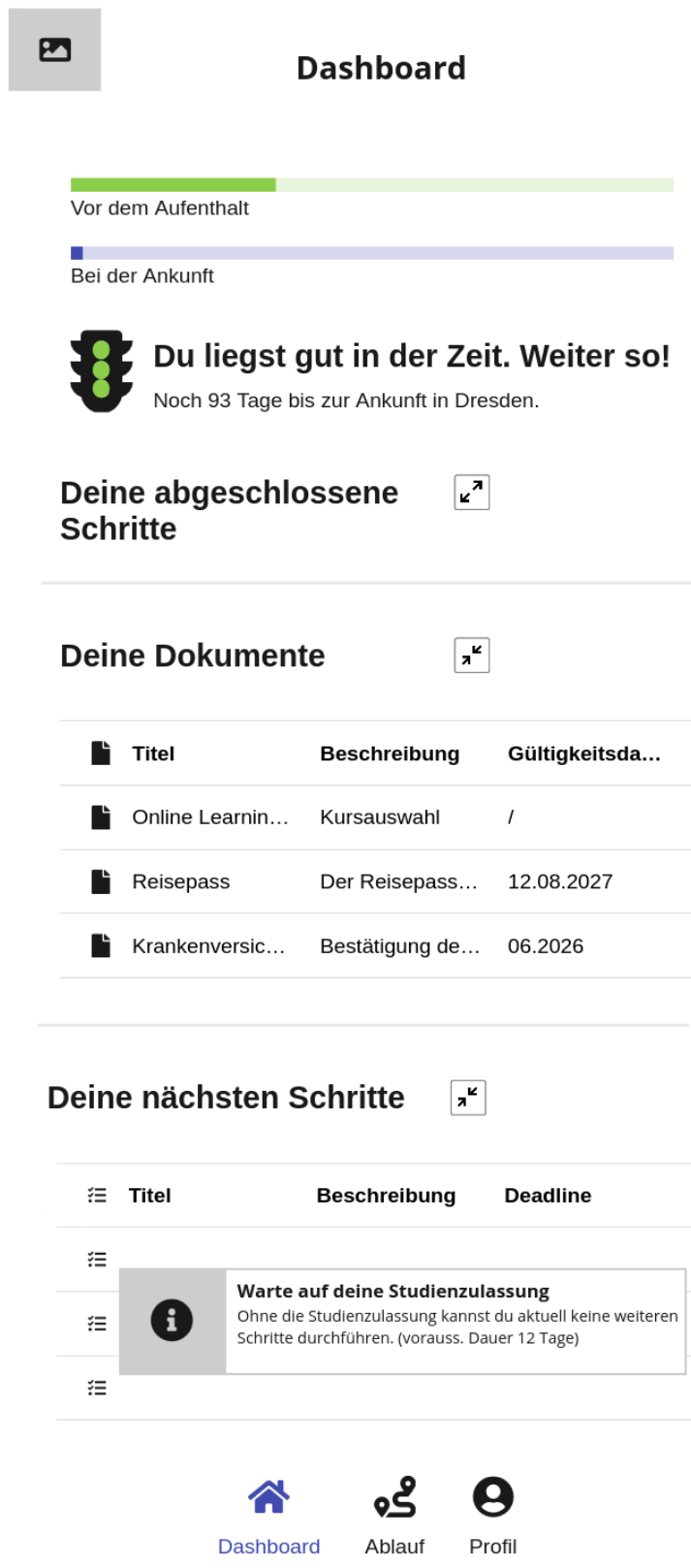
Dashboard   Ablauf   Profil
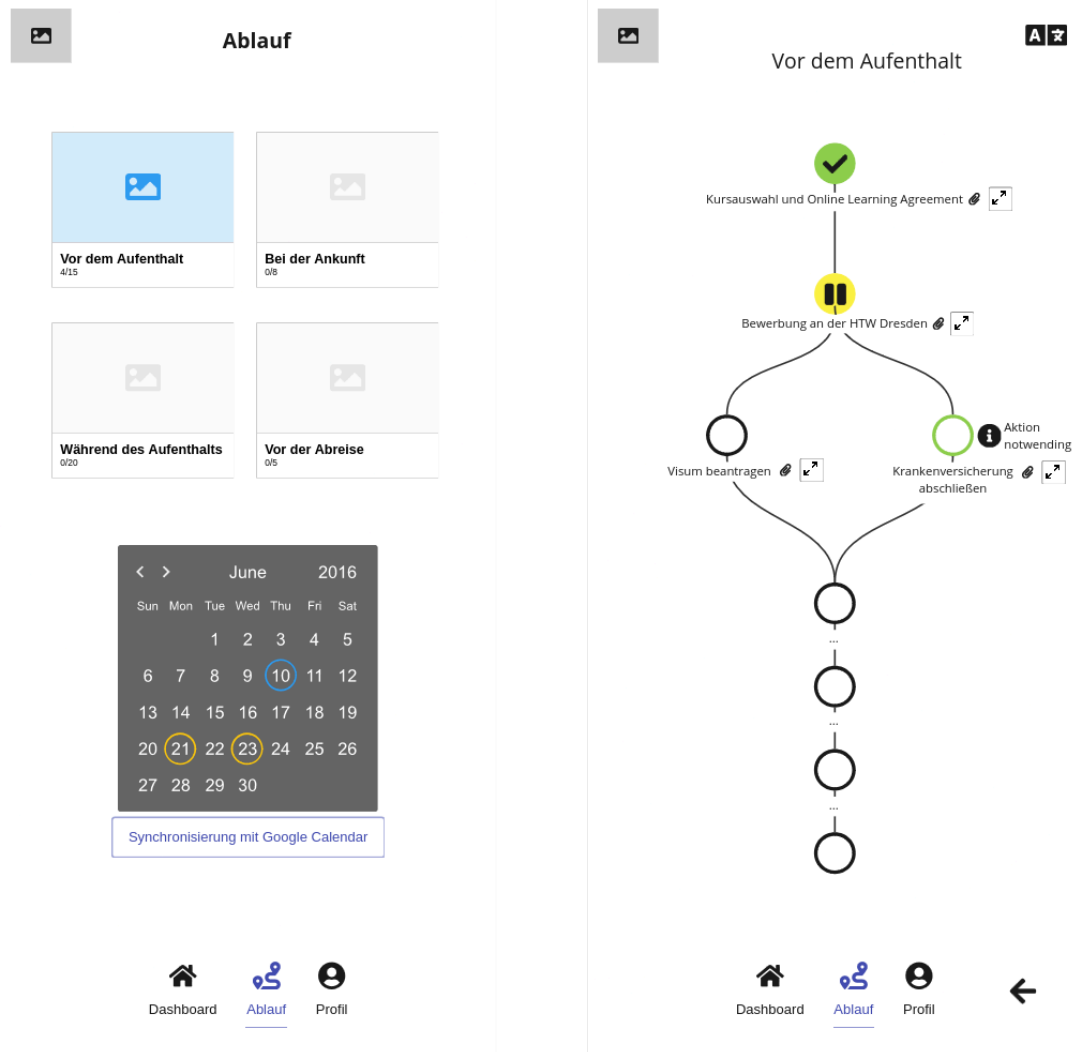
Abbildung 9: Prototyp - Darstellung des Dashboards

C.2.3 Prozessablauf

Abbildung 10: Prototyp - Darstellung des Ablaufs